Polyglossia: Modern multilingual typesetting with \texttt{Xe\LaTeX} and \texttt{Lua\LaTeX}

François Charette  Arthur Reutenauer

Bastien Roucairès  Jürgen Spitzmüller

2022/11/29  v1.59†

(pdf file generated on 29 November 2022)

Contents

1 Introduction 4

2 Setting up multilingual documents 4

2.1 Activating languages 4

2.2 Supported languages 5

2.3 Relation to and use of Babel language names 6

2.4 Using IETF language tags 6

2.5 Global options 12

3 Language-switching commands 12

3.1 Recommended commands 12

3.2 Babel commands 13

3.3 Other commands 14

3.4 Setting up alias commands 14

4 Font setup 15

5 Adapting hyphenation 15

5.1 Hyphenation exceptions 16

5.2 Hyphenation thresholds 16

5.3 Hyphenation disabling 16

†Please report bugs to \url{http://github.com/reutenauer/polyglossia/issues}
## Language-specific options and commands

<table>
<thead>
<tr>
<th>Section</th>
<th>Language</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>afrikaans</td>
<td>17</td>
</tr>
<tr>
<td>6.2</td>
<td>arabic</td>
<td>17</td>
</tr>
<tr>
<td>6.3</td>
<td>armenian</td>
<td>18</td>
</tr>
<tr>
<td>6.4</td>
<td>belarusian</td>
<td>18</td>
</tr>
<tr>
<td>6.5</td>
<td>bengali</td>
<td>19</td>
</tr>
<tr>
<td>6.6</td>
<td>catalan</td>
<td>20</td>
</tr>
<tr>
<td>6.7</td>
<td>chinese</td>
<td>20</td>
</tr>
<tr>
<td>6.8</td>
<td>croatian</td>
<td>20</td>
</tr>
<tr>
<td>6.9</td>
<td>czech</td>
<td>21</td>
</tr>
<tr>
<td>6.10</td>
<td>dutch</td>
<td>22</td>
</tr>
<tr>
<td>6.11</td>
<td>english</td>
<td>23</td>
</tr>
<tr>
<td>6.12</td>
<td>esperanto</td>
<td>23</td>
</tr>
<tr>
<td>6.13</td>
<td>finnish</td>
<td>23</td>
</tr>
<tr>
<td>6.14</td>
<td>french</td>
<td>24</td>
</tr>
<tr>
<td>6.15</td>
<td>gaelic</td>
<td>25</td>
</tr>
<tr>
<td>6.16</td>
<td>georgian</td>
<td>25</td>
</tr>
<tr>
<td>6.17</td>
<td>german</td>
<td>26</td>
</tr>
<tr>
<td>6.18</td>
<td>greek</td>
<td>27</td>
</tr>
<tr>
<td>6.19</td>
<td>hebrew</td>
<td>28</td>
</tr>
<tr>
<td>6.20</td>
<td>hindi</td>
<td>28</td>
</tr>
<tr>
<td>6.21</td>
<td>hungarian</td>
<td>28</td>
</tr>
<tr>
<td>6.22</td>
<td>italian</td>
<td>29</td>
</tr>
<tr>
<td>6.23</td>
<td>korean</td>
<td>29</td>
</tr>
<tr>
<td>6.24</td>
<td>kurdish</td>
<td>30</td>
</tr>
<tr>
<td>6.25</td>
<td>lao</td>
<td>30</td>
</tr>
<tr>
<td>6.26</td>
<td>latin</td>
<td>31</td>
</tr>
<tr>
<td>6.27</td>
<td>malay</td>
<td>33</td>
</tr>
<tr>
<td>6.28</td>
<td>marathi</td>
<td>34</td>
</tr>
<tr>
<td>6.29</td>
<td>mongolian</td>
<td>34</td>
</tr>
<tr>
<td>6.30</td>
<td>norwegian</td>
<td>35</td>
</tr>
<tr>
<td>6.31</td>
<td>persian</td>
<td>35</td>
</tr>
<tr>
<td>6.32</td>
<td>polish</td>
<td>35</td>
</tr>
<tr>
<td>6.33</td>
<td>portuguese</td>
<td>36</td>
</tr>
<tr>
<td>6.34</td>
<td>punjabi</td>
<td>37</td>
</tr>
<tr>
<td>6.35</td>
<td>russian</td>
<td>37</td>
</tr>
<tr>
<td>6.36</td>
<td>sami</td>
<td>39</td>
</tr>
<tr>
<td>6.37</td>
<td>sanskrit</td>
<td>39</td>
</tr>
<tr>
<td>6.38</td>
<td>serbian</td>
<td>39</td>
</tr>
<tr>
<td>6.39</td>
<td>slovak</td>
<td>40</td>
</tr>
<tr>
<td>6.40</td>
<td>slovenian</td>
<td>41</td>
</tr>
</tbody>
</table>
6.41 sorbian ................................................................. 41
6.42 spanish ............................................................... 41
6.43 syriac ................................................................. 42
6.44 thai ................................................................. 42
6.45 tibetan ............................................................... 42
6.46 ukrainian ........................................................... 43
6.47 uyghur ............................................................... 44
6.48 welsh ............................................................... 45

7 Modifying or extending captions, date formats and language settings 45

8 Script-specific numbering 46
  8.1 General localization of numbering ......................... 47
  8.2 Non-Western decimal digits ................................. 47
  8.3 Non-Latin alphabetic numbering ......................... 48

9 Footnotes in right-to-left context 50
  9.1 Horizontal footnote position ............................... 50
  9.2 Footnote rule length and position ....................... 50

10 Calendars 51
  10.1 Hebrew calendar (hebrewcal.sty) ....................... 51
  10.2 Islamic calendar (hijrical.sty) ......................... 51
  10.3 Farsi (jalālī) calendar (farsical.sty) ................... 52

11 Auxiliary commands 52

12 Accessing language information 52

13 Revision history 53

14 Acknowledgements (by François Charette) 68

15 More acknowledgements (by the current development team) 69
1 Introduction

Polyglossia is a package for facilitating multilingual typesetting with \LaTeX{} and \texttt{LuaLaTeX}. Basically, it can be used as an alternative to \texttt{babel} for performing the following tasks automatically:

1. Loading the appropriate hyphenation patterns.
2. Setting the script and language tags of the current font (if possible and available), via the package \texttt{fontspec}.
3. Switching to a font assigned by the user to a particular script or language.
4. Adjusting some typographical conventions according to the current language (such as afterindent, frenchindent, spaces before or after punctuation marks, etc.).
5. Redefining all document strings (like "chapter", "figure", "bibliography").
6. Adapting the formatting of dates (for non-Gregorian calendars via external packages bundled with polyglossia: currently the Hebrew, Islamic and Farsi calendars are supported).
7. For languages that have their own numbering system, modifying the formatting of numbers appropriately (this also includes redefining the alphabetic sequence for non-Latin alphabets).
8. Ensuring proper directionality if the document contains languages that are written from right to left (via the package \texttt{bidi}, available separately).

Several features of \texttt{babel} that do not make sense in the \LaTeX{} world (like font encodings, shorthands, etc.) are not supported. Generally speaking, polyglossia aims to remain as compatible as possible with the fundamental features of \texttt{babel} while being cleaner, light-weight, and modern. The package \texttt{antomega} has been very beneficial in our attempt to reach this objective.

Requirements The current version of polyglossia makes use of some convenient macros defined in the \texttt{etoolbox} package by Philipp Lehmann and Joseph Wright. Being designed for \LaTeX{} and \texttt{LuaLaTeX}, it obviously also relies on \texttt{fontspec} by Will Robertson. For languages written from right to left, it needs the package \texttt{bidi} (for \LaTeX{}) or \texttt{luabidi} (for \texttt{LuaLaTeX}) by Vafa Khalighi (وفا خالیقی) and the \texttt{bidi-tex GitHub Organisation}. Polyglossia also bundles three packages for calendaric computations (\texttt{hebrewcal}, \texttt{hijrical}, and \texttt{farsical}).

2 Setting up multilingual documents

2.1 Activating languages

The default language of a document is specified by means of the command

\begin{verbatim}
\setdefaultlanguage\{\langle\text{options}\rangle\}\{\langle\text{lang}\rangle\}
\end{verbatim}

\footnote{This is done by bundled sub-packages such as \texttt{arabicnumbers}.}
\setmainlanguage
(or, equivalently, \setmainlanguage). Secondary languages are specified with
\setotherlanguage{(options)}{(lang)}.
All these commands allow you to set language-specific options.² It is also possible
to load a series of secondary languages at once (but without options) using
\setotherlanguages{(lang1),(lang2),(lang3),(...)}.
All language-specific options can be modified locally by means of the language-switching commands described in section 3.

Note In general, it is advisable to activate the languages after all packages have been loaded. This is particularly important if you use right-to-left scripts or languages with babel shorthands.

2.2 Supported languages

Table 1 lists all languages currently supported. Those in red have specific options
and/or commands that are explained in section 6 below.

Table 1. Languages currently supported in polyglossia

<table>
<thead>
<tr>
<th>afrikaans</th>
<th>danish</th>
<th>icelandic</th>
<th>nko</th>
<th>spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>albanian</td>
<td>divehi</td>
<td>interlingua</td>
<td>norwegian</td>
<td>swedish</td>
</tr>
<tr>
<td>amharic</td>
<td>dutch</td>
<td>italian</td>
<td>occitan</td>
<td>syriac</td>
</tr>
<tr>
<td>arabic</td>
<td>english</td>
<td>japanese</td>
<td>persian</td>
<td>tamil</td>
</tr>
<tr>
<td>armenian</td>
<td>esperanto</td>
<td>kannada</td>
<td>piedmontese</td>
<td>telugu</td>
</tr>
<tr>
<td>asturian</td>
<td>estonian</td>
<td>khmer</td>
<td>polish</td>
<td>thai</td>
</tr>
<tr>
<td>basque</td>
<td>finnish</td>
<td>korean</td>
<td>portuguese</td>
<td>tibetan</td>
</tr>
<tr>
<td>belarusian</td>
<td>french</td>
<td>kurdish</td>
<td>punjabi</td>
<td>turkish</td>
</tr>
<tr>
<td>bengali</td>
<td>friulian</td>
<td>lao</td>
<td>romanian</td>
<td>turkmen</td>
</tr>
<tr>
<td>bosnian</td>
<td>gaelic</td>
<td>latin</td>
<td>romansh</td>
<td>ukrainian</td>
</tr>
<tr>
<td>breton</td>
<td>galician</td>
<td>latvian</td>
<td>russian</td>
<td>urdu</td>
</tr>
<tr>
<td>bulgarian</td>
<td>georgian</td>
<td>lithuanian</td>
<td>sami</td>
<td>uyghur</td>
</tr>
<tr>
<td>catalan</td>
<td>german</td>
<td>macedonian</td>
<td>sanskrit</td>
<td>vietnamese</td>
</tr>
<tr>
<td>chinese</td>
<td>greek</td>
<td>malay</td>
<td>serbian</td>
<td>welsh</td>
</tr>
<tr>
<td>coptic</td>
<td>hebrew</td>
<td>malayalam</td>
<td>slovak</td>
<td></td>
</tr>
<tr>
<td>croatian</td>
<td>hindi</td>
<td>marathi</td>
<td>slovenian</td>
<td></td>
</tr>
<tr>
<td>czech</td>
<td>hungarian</td>
<td>mongolian</td>
<td>sorbian</td>
<td></td>
</tr>
</tbody>
</table>

Version Notes The support for Amharic ← should be considered an experimental attempt to port the package ethiop; feedback is welcome. Version 1.1.1 ← added support for Asturian, Lithuanian, and Urdu. Version 1.2 ← introduced

²Section 6 documents these options for the respective languages.
Armenian, Occitan, Bengali, Lao, Malayalam, Marathi, Tamil, Telugu, and Turkmen.\textsuperscript{3} Version 1.43 \leftarrow brought basic support for Japanese (this is considered experimental, feedback is appreciated). In version 1.45 \leftarrow, support for Kurdish and Mongolian as well as some new variants (Canadian French and English) have been added. Furthermore, for consistency reasons, some language have been renamed (\textit{farsi}⟶\textit{persian}, \textit{friulian}⟶\textit{friulian}, \textit{magyar}⟶\textit{hungarian}, \textit{portuges}⟶\textit{portuguese}, \textit{samin}⟶\textit{samii}) or merged (\textit{bahasa/bahasam}⟶\textit{malay}, \textit{brazil/portuges}⟶\textit{portuguese}, \textit{lsorbian/usorbian}⟶\textit{sorbian}, \textit{irish/scottish}⟶\textit{gaelic}, \textit{norsk/nynorsk}⟶\textit{norwegian}). The old names are still supported for backwards compatibility reasons. Version 1.46 \leftarrow introduces support for Afrikaans, Belarusian, Bosnian and Georgian. Version 1.52 \leftarrow introduces support for Uyghur.

\subsection{2.3 Relation to and use of Babel language names}

If you are familiar with the \textit{babel} package, you will note that \textit{polyglossia}'s language naming slightly differs. Whereas \textit{babel} has a unique name for each language variety (\textit{e.g.}, \textit{american} and \textit{british}), \textit{polyglossia} differentiates language varieties via language options (\textit{e.g.}, \textit{english}, \textit{variant=american}).

Furthermore, \textit{babel} sometimes uses abbreviated language names (\textit{e.g.}, \textit{ba-hasam} for Bahasa Malayu) as well as endonyms, \textit{i.e.}, language names coming from the designated languages (such as \textit{bahasa}, \textit{canadien} or \textit{magyar}). As opposed to this, \textit{polyglossia} always uses spelled-out (lower-cased) English language names. Please refer to table \ref{tab:babel_name} for the differing language names in both packages.

For convenience reasons, \textit{polyglossia} also supports the use of babel names \leftarrow (for the few justified exceptions, please refer to the notes in table \ref{tab:babel_name}). The babel names listed in table \ref{tab:babel_name} can be used instead of the corresponding polyglossia name/options in \texttt{\setdefaultlanguage} and \texttt{\setotherlanguage} as well as in the \textit{polyglossia} and \textit{babel} language switching commands/environments documented in section \ref{sec:switching} and \ref{sec:environments} (\textit{e.g.}, \texttt{\textaustrian} is synonymous to \texttt{\textgerman[variant=austrian,spelling=old]}). However, unless you have special reasons, we strongly encourage you to use the \textit{polyglossia} names.

\subsection{2.4 Using IETF language tags}

\textit{Polyglossia} \leftarrow also supports the use of language tags that conform to the IETF BCP-47 Best Current Practice.\textsuperscript{4} Thus, you can use tags such as \textit{en-68} (for British English) or \textit{de-AT-1901} (for Austrian German, old spelling) in \texttt{\setdefaultlanguage} and \texttt{\setotherlanguage} as well as in the language switching command \texttt{\textlang{⟨tag⟩}}, the environment \texttt{\begin{lang}{⟨tag⟩} \ldots\end{lang}}.

\begin{table}
\begin{tabular}{|l|l|l|}
\hline
Language & Tag & Notes \\
\hline
Bahasa & en & \\
\hline
Canadien & fr & \\
\hline
Magyar & hu & \\
\hline
Portuguese & pt & \\
\hline
Sami & sm & \\
\hline
Nynorsk & no & \\
\hline
\end{tabular}
\end{table}

\textsuperscript{3}See acknowledgements at the end for due credit to the various contributors.

<table>
<thead>
<tr>
<th>Babel name</th>
<th>Polyglossia name</th>
<th>Polyglossia options</th>
</tr>
</thead>
<tbody>
<tr>
<td>acadien</td>
<td>french</td>
<td>variant=acadian</td>
</tr>
<tr>
<td>american</td>
<td>english</td>
<td>variant=american [default]</td>
</tr>
<tr>
<td>australian</td>
<td>english</td>
<td>variant=australian</td>
</tr>
<tr>
<td>austrian</td>
<td>german</td>
<td>variant=austrian, spelling=old</td>
</tr>
<tr>
<td>bahasa</td>
<td>malay</td>
<td>variant=indonesian [default]</td>
</tr>
<tr>
<td>bahasam</td>
<td>malay</td>
<td>variant=malaysian</td>
</tr>
<tr>
<td>brazil</td>
<td>portuguese</td>
<td>variant=brazilian</td>
</tr>
<tr>
<td>british</td>
<td>english</td>
<td>variant=british</td>
</tr>
<tr>
<td>canadian</td>
<td>english</td>
<td>variant=canadian</td>
</tr>
<tr>
<td>canadien</td>
<td>french</td>
<td>variant=canadian</td>
</tr>
<tr>
<td>classiclatin</td>
<td>latin</td>
<td>variant=classic</td>
</tr>
<tr>
<td>farsi</td>
<td>persian</td>
<td></td>
</tr>
<tr>
<td>ecclesiasticlatin</td>
<td>latin</td>
<td>variant=ecclesiastic</td>
</tr>
<tr>
<td>friulan</td>
<td>friulian</td>
<td></td>
</tr>
<tr>
<td>german⁴</td>
<td>german</td>
<td>spelling=old</td>
</tr>
<tr>
<td>irish</td>
<td>gaelic</td>
<td>variant=irish [default]</td>
</tr>
<tr>
<td>kurmanji</td>
<td>kurdish</td>
<td>variant=kurmanji</td>
</tr>
<tr>
<td>lowersorbian</td>
<td>sorbian</td>
<td>variant=lower</td>
</tr>
<tr>
<td>magyar</td>
<td>hungarian</td>
<td></td>
</tr>
<tr>
<td>medievallatin</td>
<td>latin</td>
<td>variant=medieval</td>
</tr>
<tr>
<td>naustrian</td>
<td>german</td>
<td>variant=austrian</td>
</tr>
<tr>
<td>newzealand</td>
<td>english</td>
<td>variant=newzealand</td>
</tr>
<tr>
<td>ngerman</td>
<td>german</td>
<td>variant=german [default]</td>
</tr>
<tr>
<td>norsk</td>
<td>norwegian</td>
<td>variant=bokmal</td>
</tr>
<tr>
<td>nswissgerman</td>
<td>german</td>
<td>variant=swiss</td>
</tr>
<tr>
<td>nynorsk</td>
<td>norwegian</td>
<td>variant=nynorsk [default]</td>
</tr>
<tr>
<td>polutonikogreek</td>
<td>greek</td>
<td>variant=polytonic</td>
</tr>
<tr>
<td>portuges</td>
<td>portuguese</td>
<td>variant=portuguese [default]</td>
</tr>
<tr>
<td>samin</td>
<td>sami</td>
<td></td>
</tr>
<tr>
<td>scottish</td>
<td>gaelic</td>
<td>variant=scottish</td>
</tr>
<tr>
<td>serbian</td>
<td>serbian</td>
<td>script=Cyrillic</td>
</tr>
<tr>
<td>slovene</td>
<td>slovenian</td>
<td></td>
</tr>
<tr>
<td>spanishmx</td>
<td>spanish</td>
<td>variant=mexican</td>
</tr>
<tr>
<td>swissgerman</td>
<td>german</td>
<td>variant=swiss, spelling=old</td>
</tr>
<tr>
<td>uppersorbian</td>
<td>sorbian</td>
<td>variant=upper [default]</td>
</tr>
</tbody>
</table>

⁴Due to the name conflict only available in polyglossia as germanb (which is a babel synonym).
\end{lang} and the babel language switching commands/environments documented in section 3.2. Table 3 lists the currently supported tags.

**Table 3.** BCP47-polyglossia language name matching

<table>
<thead>
<tr>
<th>BCP-47 tag</th>
<th>Polyglossia name</th>
<th>Polyglossia options</th>
</tr>
</thead>
<tbody>
<tr>
<td>aeb</td>
<td>arabic</td>
<td>locale=tunisia</td>
</tr>
<tr>
<td>af</td>
<td>afrikaans</td>
<td></td>
</tr>
<tr>
<td>afb</td>
<td>arabic</td>
<td>locale=default</td>
</tr>
<tr>
<td>am</td>
<td>amharic</td>
<td></td>
</tr>
<tr>
<td>apd</td>
<td>arabic</td>
<td>locale=default</td>
</tr>
<tr>
<td>ar</td>
<td>arabic</td>
<td></td>
</tr>
<tr>
<td>ar-JIQ</td>
<td>arabic</td>
<td>locale=mashriq</td>
</tr>
<tr>
<td>ar-JO</td>
<td>arabic</td>
<td>locale=mashriq</td>
</tr>
<tr>
<td>ar-LB</td>
<td>arabic</td>
<td>locale=mashriq</td>
</tr>
<tr>
<td>ar-MR</td>
<td>arabic</td>
<td>locale=mauritania</td>
</tr>
<tr>
<td>ar-PS</td>
<td>arabic</td>
<td>locale=mashriq</td>
</tr>
<tr>
<td>ar-SY</td>
<td>arabic</td>
<td>locale=mashriq</td>
</tr>
<tr>
<td>ar-YE</td>
<td>arabic</td>
<td>locale=default</td>
</tr>
<tr>
<td>arq</td>
<td>arabic</td>
<td>locale=algeria</td>
</tr>
<tr>
<td>ary</td>
<td>arabic</td>
<td>locale=morocco</td>
</tr>
<tr>
<td>arz</td>
<td>arabic</td>
<td>locale=default</td>
</tr>
<tr>
<td>ast</td>
<td>asturian</td>
<td></td>
</tr>
<tr>
<td>ayl</td>
<td>arabic</td>
<td>locale=libya</td>
</tr>
<tr>
<td>be</td>
<td>belarusian</td>
<td></td>
</tr>
<tr>
<td>be-tarask</td>
<td>belarusian</td>
<td>spelling=classic</td>
</tr>
<tr>
<td>bg</td>
<td>bulgarian</td>
<td></td>
</tr>
<tr>
<td>bn</td>
<td>bengali</td>
<td></td>
</tr>
<tr>
<td>bo</td>
<td>tibetan</td>
<td></td>
</tr>
<tr>
<td>br</td>
<td>breton</td>
<td></td>
</tr>
<tr>
<td>bs</td>
<td>bosnian</td>
<td></td>
</tr>
<tr>
<td>ca</td>
<td>catalan</td>
<td></td>
</tr>
<tr>
<td>ckb</td>
<td>kurdish</td>
<td>variant=sorani [default]</td>
</tr>
<tr>
<td>ckb-Arab</td>
<td>kurdish</td>
<td>variant=sorani, script=Arabic [default]</td>
</tr>
<tr>
<td>ckb-Latin</td>
<td>kurdish</td>
<td>variant=sorani, script=Latin</td>
</tr>
<tr>
<td>cop</td>
<td>coptic</td>
<td></td>
</tr>
<tr>
<td>cy</td>
<td>welsh</td>
<td></td>
</tr>
<tr>
<td>cz</td>
<td>czech</td>
<td></td>
</tr>
<tr>
<td>da</td>
<td>danish</td>
<td></td>
</tr>
<tr>
<td>de</td>
<td>german</td>
<td>variant=austrian, spelling=new</td>
</tr>
<tr>
<td>de-AT</td>
<td>german</td>
<td>variant=austrian, spelling=old</td>
</tr>
<tr>
<td>de-AT-1901</td>
<td>german</td>
<td>variant=austrian, spelling=old</td>
</tr>
<tr>
<td>de-AT-1996</td>
<td>german</td>
<td>variant=austrian, spelling=new</td>
</tr>
<tr>
<td>de-CH</td>
<td>german</td>
<td>variant=swiss, spelling=new</td>
</tr>
<tr>
<td>de-CH-1901</td>
<td>german</td>
<td>variant=swiss, spelling=old</td>
</tr>
<tr>
<td>de-CH-1996</td>
<td>german</td>
<td>variant=swiss, spelling=new</td>
</tr>
<tr>
<td>BCP-47 tag</td>
<td>Polyglossia name</td>
<td>Polyglossia options</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>de-DE</td>
<td>german</td>
<td>variant=german, spelling=new</td>
</tr>
<tr>
<td>de-DE-1901</td>
<td>german</td>
<td>variant=german, spelling=old</td>
</tr>
<tr>
<td>de-DE-1996</td>
<td>german</td>
<td>variant=german, spelling=new</td>
</tr>
<tr>
<td>de-Latf</td>
<td>german</td>
<td></td>
</tr>
<tr>
<td>de-Latf-AT</td>
<td>german</td>
<td>variant=austrian, spelling=new,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>script=blackletter</td>
</tr>
<tr>
<td>de-Latf-AT-1901</td>
<td></td>
<td>variant=austrian, spelling=old,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>script=blackletter</td>
</tr>
<tr>
<td>de-Latf-AT-1996</td>
<td></td>
<td>variant=austrian, spelling=new,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>script=blackletter</td>
</tr>
<tr>
<td>de-Latf-CH</td>
<td>german</td>
<td>variant=swiss, spelling=new,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>script=blackletter</td>
</tr>
<tr>
<td>de-Latf-CH-1901</td>
<td></td>
<td>variant=swiss, spelling=old,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>script=blackletter</td>
</tr>
<tr>
<td>de-Latf-CH-1996</td>
<td></td>
<td>variant=swiss, spelling=new,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>script=blackletter</td>
</tr>
<tr>
<td>de-Latf-DE</td>
<td>german</td>
<td>variant=german, spelling=new,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>script=blackletter</td>
</tr>
<tr>
<td>de-Latf-DE-1901</td>
<td></td>
<td>variant=german, spelling=old,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>script=blackletter</td>
</tr>
<tr>
<td>de-Latf-DE-1996</td>
<td></td>
<td>variant=german, spelling=old,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>script=blackletter</td>
</tr>
<tr>
<td>dsb</td>
<td>sorbian</td>
<td>variant=lower</td>
</tr>
<tr>
<td>dv</td>
<td>divehi</td>
<td></td>
</tr>
<tr>
<td>el</td>
<td>greek</td>
<td></td>
</tr>
<tr>
<td>el-monoton</td>
<td>greek</td>
<td>variant=monotonic [default]</td>
</tr>
<tr>
<td>el-polyton</td>
<td>greek</td>
<td>variant=polytonic</td>
</tr>
<tr>
<td>en</td>
<td>english</td>
<td>variant=australian</td>
</tr>
<tr>
<td>en-AU</td>
<td>english</td>
<td>variant=australian</td>
</tr>
<tr>
<td>en-CA</td>
<td>english</td>
<td>variant=canadian</td>
</tr>
<tr>
<td>en-GB</td>
<td>english</td>
<td>variant=british</td>
</tr>
<tr>
<td>en-NZ</td>
<td>english</td>
<td>variant=newzealand</td>
</tr>
<tr>
<td>en-US</td>
<td>english</td>
<td>variant=us [default]</td>
</tr>
<tr>
<td>eo</td>
<td>esperanto</td>
<td></td>
</tr>
<tr>
<td>es</td>
<td>spanish</td>
<td></td>
</tr>
<tr>
<td>es-ES</td>
<td>spanish</td>
<td>variant=spanish [default]</td>
</tr>
<tr>
<td>es-MX</td>
<td>spanish</td>
<td>variant=mexican</td>
</tr>
<tr>
<td>et</td>
<td>estonian</td>
<td></td>
</tr>
<tr>
<td>eu</td>
<td>basque</td>
<td></td>
</tr>
<tr>
<td>fa</td>
<td>persian</td>
<td></td>
</tr>
<tr>
<td>fi</td>
<td>finnish</td>
<td></td>
</tr>
<tr>
<td>fr</td>
<td>french</td>
<td></td>
</tr>
<tr>
<td>fr-CA</td>
<td>french</td>
<td>variant=canadian</td>
</tr>
<tr>
<td>fr-CH</td>
<td>french</td>
<td>variant=swiss</td>
</tr>
<tr>
<td>BCP-47 tag</td>
<td>Polyglossia name</td>
<td>Polyglossia options</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>fr-FR</td>
<td>french</td>
<td>variant=french [default]</td>
</tr>
<tr>
<td>fur</td>
<td>friulan</td>
<td></td>
</tr>
<tr>
<td>ga</td>
<td>gaelic</td>
<td>variant=irish [default]</td>
</tr>
<tr>
<td>gd</td>
<td>gaelic</td>
<td>variant=scottish</td>
</tr>
<tr>
<td>gl</td>
<td>galician</td>
<td></td>
</tr>
<tr>
<td>grc</td>
<td>greek</td>
<td>variant=ancient</td>
</tr>
<tr>
<td>he</td>
<td>hebrew</td>
<td></td>
</tr>
<tr>
<td>hi</td>
<td>hindi</td>
<td></td>
</tr>
<tr>
<td>hr</td>
<td>croatian</td>
<td></td>
</tr>
<tr>
<td>hsb</td>
<td>sorbian</td>
<td>variant=upper [default]</td>
</tr>
<tr>
<td>hu</td>
<td>hungarian</td>
<td></td>
</tr>
<tr>
<td>hy</td>
<td>armenian</td>
<td></td>
</tr>
<tr>
<td>ia</td>
<td>interlingua</td>
<td></td>
</tr>
<tr>
<td>id</td>
<td>malay</td>
<td>variant=indonesian</td>
</tr>
<tr>
<td>is</td>
<td>icelandic</td>
<td></td>
</tr>
<tr>
<td>it</td>
<td>italian</td>
<td></td>
</tr>
<tr>
<td>ja</td>
<td>japanese</td>
<td></td>
</tr>
<tr>
<td>ka</td>
<td>georgian</td>
<td></td>
</tr>
<tr>
<td>km</td>
<td>khmer</td>
<td></td>
</tr>
<tr>
<td>kmr</td>
<td>kurdish</td>
<td>variant=kurmanji</td>
</tr>
<tr>
<td>kmr-Arab</td>
<td>kurdish</td>
<td>variant=kurmanji, script=Arabic</td>
</tr>
<tr>
<td>kmr-Latn</td>
<td>kurdish</td>
<td>variant=kurmanji, script=Latin</td>
</tr>
<tr>
<td>kn</td>
<td>kannada</td>
<td></td>
</tr>
<tr>
<td>ko</td>
<td>korean</td>
<td></td>
</tr>
<tr>
<td>ku</td>
<td>kurdish</td>
<td></td>
</tr>
<tr>
<td>ku-Arab</td>
<td>kurdish</td>
<td>script=Arabic</td>
</tr>
<tr>
<td>ku-Latn</td>
<td>kurdish</td>
<td>script=Latin</td>
</tr>
<tr>
<td>la</td>
<td>latin</td>
<td></td>
</tr>
<tr>
<td>la-x-classic</td>
<td>latin</td>
<td>variant=classic</td>
</tr>
<tr>
<td>la-x-ecclesia</td>
<td>latin</td>
<td>variant=ecclesiastic</td>
</tr>
<tr>
<td>la-x-medieval</td>
<td>latin</td>
<td>variant=medieval</td>
</tr>
<tr>
<td>lo</td>
<td>lao</td>
<td></td>
</tr>
<tr>
<td>lt</td>
<td>lithuanian</td>
<td></td>
</tr>
<tr>
<td>lv</td>
<td>latvian</td>
<td></td>
</tr>
<tr>
<td>mk</td>
<td>macedonian</td>
<td></td>
</tr>
<tr>
<td>ml</td>
<td>malayalam</td>
<td></td>
</tr>
<tr>
<td>mn</td>
<td>mongolian</td>
<td></td>
</tr>
<tr>
<td>mr</td>
<td>marathi</td>
<td></td>
</tr>
<tr>
<td>nb</td>
<td>norwegian</td>
<td>variant=bokmal</td>
</tr>
<tr>
<td>nko</td>
<td>nko</td>
<td></td>
</tr>
<tr>
<td>nl</td>
<td>dutch</td>
<td></td>
</tr>
<tr>
<td>nn</td>
<td>norwegian</td>
<td>variant=nynorsk [default]</td>
</tr>
<tr>
<td>oc</td>
<td>occitan</td>
<td></td>
</tr>
<tr>
<td>pa</td>
<td>punjabi</td>
<td>numerals=gurmukhi</td>
</tr>
<tr>
<td>BCP-47 tag</td>
<td>Polyglossia name</td>
<td>Polyglossia options</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>pl</td>
<td>polish</td>
<td></td>
</tr>
<tr>
<td>pms</td>
<td>piedmontese</td>
<td></td>
</tr>
<tr>
<td>pt</td>
<td>portuguese</td>
<td></td>
</tr>
<tr>
<td>pt-BR</td>
<td>portuguese</td>
<td>variant=brazilian</td>
</tr>
<tr>
<td>pt-PT</td>
<td>portuguese</td>
<td>variant=portuguese</td>
</tr>
<tr>
<td>rm</td>
<td>romanish</td>
<td></td>
</tr>
<tr>
<td>ro</td>
<td>romanian</td>
<td></td>
</tr>
<tr>
<td>ru</td>
<td>russian</td>
<td></td>
</tr>
<tr>
<td>ru-luna1918</td>
<td>russian</td>
<td>spelling=modern</td>
</tr>
<tr>
<td>ru-petr1708</td>
<td>russian</td>
<td>spelling=old</td>
</tr>
<tr>
<td>sa</td>
<td>sanskrit</td>
<td></td>
</tr>
<tr>
<td>sa-Beng</td>
<td>sanskrit</td>
<td>script=Bengali</td>
</tr>
<tr>
<td>sa-Deva</td>
<td>sanskrit</td>
<td>script=Devanagari</td>
</tr>
<tr>
<td>sa-Gujr</td>
<td>sanskrit</td>
<td>script=Gujarati</td>
</tr>
<tr>
<td>sa-Knda</td>
<td>sanskrit</td>
<td>script=Kannada</td>
</tr>
<tr>
<td>sa-Mlym</td>
<td>sanskrit</td>
<td>script=Malayalam</td>
</tr>
<tr>
<td>sa-Telu</td>
<td>sanskrit</td>
<td>script=Telugu</td>
</tr>
<tr>
<td>se</td>
<td>sami</td>
<td></td>
</tr>
<tr>
<td>sk</td>
<td>slovak</td>
<td></td>
</tr>
<tr>
<td>sl</td>
<td>slovenian</td>
<td></td>
</tr>
<tr>
<td>sq</td>
<td>albanian</td>
<td></td>
</tr>
<tr>
<td>sr</td>
<td>serbian</td>
<td></td>
</tr>
<tr>
<td>sr-Cyrl</td>
<td>serbian</td>
<td>script=Cyrillic</td>
</tr>
<tr>
<td>sr-Latn</td>
<td>serbian</td>
<td>script=Latin</td>
</tr>
<tr>
<td>sv</td>
<td>swedish</td>
<td></td>
</tr>
<tr>
<td>syr</td>
<td>syriac</td>
<td></td>
</tr>
<tr>
<td>ta</td>
<td>tamil</td>
<td></td>
</tr>
<tr>
<td>te</td>
<td>telugu</td>
<td></td>
</tr>
<tr>
<td>th</td>
<td>thai</td>
<td></td>
</tr>
<tr>
<td>tk</td>
<td>turkmen</td>
<td></td>
</tr>
<tr>
<td>tr</td>
<td>turkish</td>
<td></td>
</tr>
<tr>
<td>ug</td>
<td>uyghur</td>
<td></td>
</tr>
<tr>
<td>uk</td>
<td>ukrainian</td>
<td></td>
</tr>
<tr>
<td>ur</td>
<td>urdu</td>
<td></td>
</tr>
<tr>
<td>vi</td>
<td>vietnamese</td>
<td></td>
</tr>
<tr>
<td>zh</td>
<td>chinese</td>
<td></td>
</tr>
<tr>
<td>zh-CN</td>
<td>chinese</td>
<td>variant=simplified</td>
</tr>
<tr>
<td>zh-TW</td>
<td>chinese</td>
<td>variant=traditional</td>
</tr>
<tr>
<td>zsm</td>
<td>malay</td>
<td>variant=malaysian</td>
</tr>
</tbody>
</table>
2.5 Global options

Polyglossia can be loaded with the following global package options:

- **babelshorthands** ← *true or false
  Globally activates *babel* shorthands whenever available. Such shorthands are implemented currently for Afrikaans, Belarusian, Catalan, Croatian, Czech, Dutch, Finnish, Georgian, German, Italian, Latin, Mongolian, Russian, Slovak, and Ukrainian. Please refer to the respective language descriptions (sec. 6) for details.

- **localmarks** = *true or false
  redefines the internal *\LaTeX* macros \markboth and \markright to the effect that the header text is explicitly set in the currently active language (i.e., wrapped into *\foreignlanguage{⟨lang⟩}{⟨…⟩})*.
  In earlier versions of *polyglossia*, ← this option was enabled by default, but we now realize that it causes more problems than it helps (since it breaks if a package or class redefines \markboth or \markright), so it is now disabled by default. For backwards compatibility, the option *nolocalmarks* which used to switch off the previous default, and now equals the default, is still available.

- **luatexrenderer** ← (renderer) (default value: *Harfbuzz*)
  determines which font renderer is used with *LuaLaTeX* output. The correct font renderer is essential particularly for non-Latin scripts. By default, *polyglossia* uses the *Harfbuzz* renderer that has been introduced to *LuaLaTeX* in 2019 (*TeXLive 2020*), as this gives the best results generally. If you want to use a different renderer, you can specify this here (or individually for specific fonts via the optional argument of the font selection commands). Please refer to the *fontspec* manual for supported values and for details on how to change the renderer for individual fonts.
  *luatexrenderer=none* disables *polyglossia*’s automatic renderer setting.

- **verbose** = *true or false
  determines whether info messages and (some of the) warnings issued by \LaTeX*, *fontspec* and *polyglossia* are output.

3 Language-switching commands

3.1 Recommended commands

\text{⟨lang⟩} \text{⟨lang⟩} (as \text{⟨lang⟩} well as the synonymous \text{⟨lang⟩} becomes available for short insertions of text in that language.

For example \textrussian{\today} and \text{russian}{\today} yield 29 ноября 2022 г. The commands switch to the correct hyphenation patterns,
they activate some extra features for the selected language (such as extra spacing before punctuation in French), and they translate the date when using \today. They do not, however, translate so-called caption strings, i.e., “chapter”, “figure” etc., to the local language (these remain in the currently active ‘outer’ language).

The environment \{lang\}, which is also available for any activated language (as well as the equivalent \begin{lang}{⟨options⟩}\{lang\} \ldots \end{lang}), is meant for longer passages of text. It behaves slightly different than the \text⟨lang⟩ and \textlang commands: It does everything the latter do, but additionally, the caption strings are translated as well, and the language is also passed to auxiliary files, the table of contents and the lists of figures/tables. Like the commands, the environment provides the possibility of setting language options locally. For instance the following allows us to quote the beginning of Homer’s \textit{Iliad}:

\begin{quote}
\begin{greek}[variant=ancient]
μῆνιν ἄειδε θεὰ Πηληϊάδεω Ἀχιλῆος οὐλομένην, ἢ μυρί’ Ἀχαιοῖς ἄλγε’ ἔθηκε, πολλάς δ’ ὑφήμους ψυχὰς Ἀδίδ προϊάμεν ἣρῶν, αὐτοῖς δὲ ἐλάφρια τεύχε κύνεσσιν οἰωνοῖσι τε πάσι, Διὸς δ’ ἐτελείετο βουλή, ἐξ οὐ δὴ τὰ πρῶτα διαστήτην ἐρίσαντε Ατρείδης τε ἀναξ ἔνδρων καὶ δίος Ἀχιλλεύς.
\end{greek}
\end{quote}

Note that for Arabic one cannot use the environment \texttt{arabic}, as \texttt{arabic} is defined internally by \LaTeX. In this case we need to use the environment \texttt{Arabic} instead.

### 3.2 Babel commands

Some macros defined in babel’s \texttt{hyphen.cfg} (and thus usually compiled into the \texttt{XeLaTeX} and \texttt{LuaLaTeX} format) are redefined, but keep a similar behaviour.

\begin{itemize}
\item \selectlanguage\{⟨options⟩\}\{lang\}
\item \foreignlanguage\{⟨options⟩\}\{lang\}\{⟨…⟩\}
\item \begin{otherlanguage}\{⟨options⟩\}\{lang\} \ldots \end{otherlanguage}
\item \begin{otherlanguage*}\{⟨options⟩\}\{lang\} \ldots \end{otherlanguage*}
\end{itemize}
\begin{hyphenrules}\[⟨options⟩\]{⟨lang⟩}…\end{hyphenrules}

\selectlanguage{⟨lang⟩} and the otherlanguage environment are identical to the ⟨lang⟩ environment, except that \selectlanguage{⟨lang⟩} does not need to be explicitly closed. The command \foreignlanguage{⟨lang⟩}{⟨…⟩} and the otherlanguage* environment are identical with the use of the \text{⟨lang⟩} or \text{⟨lang⟩} command, with the one notable exception that they do not translate the date with \today.

The ⟨hyphenrules⟩ environment only switches the hyphenation patterns to the one associated with the language ⟨lang⟩ (or the language variety as specified via ⟨options⟩). It does no further language-specific change.

Since the \LaTeX{} and \LuaLaTeX{} format incorporate babel’s hyphen.cfg, the low-level commands for hyphenation and language switching defined there are in principal also accessible. Note, however, that the availability of such low-level commands is not guaranteed, as hyphen.cfg, which is out of polyglossia’s control, is (or at least has been) subject to regular change.

3.3 Other commands

The following commands are probably of lesser interest to the end user, but ought to be mentioned here.

- \selectbackgroundlanguage{⟨lang⟩}: this selects the global font setup and the numbering definitions for the default language.
- \resetdefaultlanguage[⟨options⟩]{⟨lang⟩} (experimental): Switches the default language to another one in the middle of a document: this may have adverse effects!
- \normalfontlatin: in an environment where \normalfont has been re-defined to a non-latin script, this will reset to the font defined with \setmainfont etc. In a similar vein, it is possible to use \rmfamilylatin, \sffamilylatin, and \ttfamilylatin.
- \latinalph: Representation of counter as a lower-case letter: 1 = a, 2 = b, etc.
- \latinAlph: Representation of counter as a upper-case letter: 1 = A, 2 = B, etc.

3.4 Setting up alias commands

By means of the macro \setlanguagealias[⟨options⟩]{⟨language⟩}{⟨alias⟩} you can define alias commands for specific language (variants). E.g.,

\setlanguagealias[variant=austrian]{german}{AT}

will define a command \text{AT} as well as an environment \{AT\} which will link towards the command \text{german}[variant=austrian] and the environment
The aliases can also be used in the language switching commands described in section 3.1 and 3.2. Note, though, that the usual restrictions for command names apply, so something such as de-AT or de_AT will not work since - and _ are not allowed in command names (the same holds true for any non-ASCII character and for digits).

For the latter case, and for the case where an alias would clash with an existing command (e.g., \fi) or a \text{⟨…⟩} command (e.g., \textit), a starred version \setlanguagealias* is provided which does neither define a \text{⟨alias⟩} command nor an ⟨alias⟩ environment, but which will set up the alias for everything else, including \textlang{⟨alias⟩} and \begin{lang}{⟨alias⟩}.

Polyglossia comes with some aliases predefined, namely aliases for babel language names (see sec. 2.3) and for IETF BCP-47 language tags (the latter via \setlanguagealias*; see sec. 2.4).

4 Font setup

With polyglossia it is possible to associate a specific font with any script or language that occurs in the document. That font should always be defined as ⟨script⟩font or ⟨language⟩font. For instance, if the default font defined by \setmainfont does not support Greek, then one can define the font used to display Greek with:

\newfontfamily\greekfont[Script=Greek,⟨…⟩]{⟨font⟩}

Note that polyglossia will use the font defined as is, so assure to do all necessary settings (please refer to the fontspec documentation for details). For instance, if \arabicfont is explicitly defined, then the option Script=Arabic should be included in that definition.

If a specific sans serif or monospace ('teletype') font is needed for a particular script or language, it can be defined by means of ← ⟨script⟩fontsf or ⟨language⟩fontsf and ⟨script⟩fonttt or ⟨language⟩fonttt, respectively.

Whenever a new language is activated, polyglossia will first check whether a font has been defined for that language or – for languages in non-Latin scripts – for the script it uses. If it is not defined, it will use the currently active font and – in the case of OpenType fonts – will attempt to turn on the appropriate OpenType tags for the script and language used, in case these are available in the font, by means of fontspec’s \addfontfeature. If the current font does not appear to support the script of that language, an error message is displayed.

5 Adapting hyphenation
5.1 Hyphenation exceptions

\TeX{} provides the command \texttt{\hyphenation{⟨exceptions⟩}} to globally define hyphenation exceptions which override the hyphenation patterns for specified words. The command takes as argument a space-separated list of words where hyphenation points are marked by a dash (if no dash is used, the respective word is not hyphenated at all):

\begin{verbatim}
\hyphenation{%
  po-ly-glos-sia
  LaFeX
}
\end{verbatim}

These exceptions, however, apply to all languages. In addition to this, \texttt{polyglossia} provides the command \texttt{\pghyphenation[⟨options⟩]{⟨lang⟩}{⟨exceptions⟩}} which can be used to define exceptions that only apply to a specific language or language variant, respectively.

5.2 Hyphenation thresholds

\texttt{Polyglossia} sets reasonable defaults for the hyphenation thresholds of each language, \textit{i.e.}, the number of characters that must at least be there at the beginning or end of a word before it is hyphenated (\texttt{\lefthyphenmin} and \texttt{\righthyphenmin} in \TeX{}). For instance, with English, this threshold is 2 at the beginning (‘left’) and 3 at the end (‘right’), so a word will not be hyphenated within the first two characters at the beginning and the last three characters at the end.

To change this value, \texttt{polyglossia} provides the command \texttt{\setlanghyphenmins[⟨options⟩]{⟨lang⟩}{⟨l⟩}{⟨r⟩}} where \texttt{⟨lang⟩} is to be replaced with the respective language name or alias, \texttt{⟨options⟩} can be used to delimit the modification to a particular variety (\textit{e.g.}, via variant or spelling), \texttt{⟨l⟩} with the left threshold value (\textit{e.g.}, 3), and \texttt{⟨r⟩} with the right one (\textit{e.g.}, \texttt{\setlanghyphenmins[spelling=old]{german}{4}{4}}). This setting can be changed repeatedly in the preamble and the document body. It applies to all subsequent text in the respective language (variety), but only after the next language switch.

5.3 Hyphenation disabling

In some very specific contexts (such as music score creation), \TeX{} hyphenation is something to avoid completely as it may cause troubles. \texttt{Polyglossia} provides two functions: \texttt{\disablehyphenation} and \texttt{\enablehyphenation}. Note that if you select a new language while hyphenation is disabled, it will remain disabled. If you re-enable it, the hyphenation patterns of the currently selected language will be activated.
6    Language-specific options and commands

This section gives a list of all languages for which options and end-user commands are defined. Note the following conventions:

- The preset value of each option (i.e., the setting that applies by default, if the option is not explicitly set) is given in italics.
- If an option key may be used without a value, the value that applies for value-less keys is marked by a preceding *asterisk*.

For instance, babelshorthands = *true or false means that babelshorthands is false by default in the respective language, and that passing babelshorthands (without value) is equivalent to passing babelshorthands=true.

6.1    afrikaans

Options:

- babelshorthands ← = *true or false
  
  If this is turned on, the following shorthands defined for fine-tuning hyphenation and micro-typography of Afrikaans words are activated:
  
  "- adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to \- in default \TeX).
  "~ for a hyphen sign without a breakpoint. Useful for cases where the hyphen should stick at the following syllable.
  "| disables a ligature at this position.
  "\ allows for a line break at this position (without hyphenation sign).
  "/ a slash that allows for a subsequent line break. As opposed to \slash, hyphenation at the breakpoints preset in the hyphenation patterns is still allowed.

6.2    arabic

Options:

- calendar = gregorian or islamic (= hijri)
- locale = default, mashriq, libya, algeria, tunisia, morocco, mauritania
  
  This setting influences the spelling of the month names for the Gregorian calendar, as well as the form of the numerals (unless overridden by the following option). Recommended settings are default for Egypt, Sudan, Yemen and the Gulf states, and mashriq for Iraq, Syria, Jordan, Lebanon and Palestine.
- numerals = mashriq or maghrib
  
  The latter is the default when locale=algeria, tunisia, or morocco.
• `abjadalph ← *true or false`
  Set this to true if you want the alphabetic counters to be output using `\abjadalph` rather than `\abjad`. Note that this limits the counter scope to 28 (see `\abjadalph` below).

• `abjadimnotail ← *true or false`
  Set this to true if you want the `abjad` form of the number three to be `جو` – as in the manuscript tradition – instead of the modern usage `جو`.

**Commands:**

• `\abjad` outputs Arabic `abjad` numbers according to the Mashriq varieties. Example: `\abjad{1863}` yields `غضسج`.

• `\abjadmaghribi` outputs Arabic `abjad` numbers according to the Maghrib varieties. Example: `\abjadmaghribi{1863}` yields `شظصج`.

• `\abjadalph ← steps through the Arabic alphabet, thus it can only be used up to 28. Example: `\textarabic{\abjadalph{18}}` yields `ص`.

• `\aemph` to emphasize text with `\overline`. Example: `\textarabic{\aemph{اب}}` yields `اب`. This command is also available for Farsi, Urdu, etc.

### 6.3 armenian

**Options:**

• `variant ← eastern or western`

• `numerals ← armenian or arabic`

### 6.4 belarusian ←

**Options:**

• `babelshorthands = *true or false`
  If this is turned on, the following shorthands are activated:

  `-` adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to `-`).

  `=` adds an explicit hyphen with a breakpoint, allowing for hyphenation at the other points preset in the hyphenation patterns (as opposed to plain `-`).

  `~` for a hyphen sign without a breakpoint. Useful for cases where the hyphen should stick at the following syllable.

  `|` disables a ligature at this position.

  `""` allows for a line break at this position (without hyphenation sign).

  `",` thinspace for initials with a breakpoint in following surname.

  `"'` for German left double quotes (looks like „).
"" for German right double quotes (looks like ").
"<" for French left double quotes (looks like «).
">" for French right double quotes (looks like »).

There are also three shorthands for the Cyrillic dash (тире), which is shorter than the emdash but longer than the endash (namely 0.8 em). Note that, since it is not covered by unicode, this character is faked by telescoping two endashes:

"--- Cyrillic dash for the use in normal text. This requires preceding space in input (trailing space is optional) and prints with a non-breakable thin space before and after the dash.
"--> Cyrillic dash for the use in compound names (surnames). As opposed to "--- this removes any space before and after the dash.
"--> Cyrillic dash for denoting direct speech. This adds a larger space after the dash. Space before the dash is output as is.

numerals = arabic, cyrillic-alph or cyrillic-trad
Uses either Arabic numerals or Cyrillic alphanumerical numbering. The two Cyrillic variants differ as follows:
- cyrillic-alph steps through the Cyrillic alphabet. Thus it can only be used up to 30.
- cyrillic-trad (= cyrillic) uses a traditional Cyrillic alphanumerical system. It supports numbers up to 999 999.

spelling = modern or classic (= tarask)
With spelling=classic, captions and dates adhere to the Taraškievica (or Belarusian classical) orthography rather than the standard orthography.

Commands:
\Asbuk \asbuk: produces uppercased Cyrillic alphanumerals, for environments such as enumerate. It steps through the Cyrillic alphabet and thus it can only be used up to 30. The command takes a counter as argument, e.g., \textbelarusian{\Asbuk{page}} produces П.
\AsbukTrad \asbukTrad: same as \Asbuk but using the traditional Cyrillic alphanumerical numbering which supports numbers up to 999 999. E.g., \textbelarusian{\AsbukTrad{page}} produces ІѲ.

6.5 bengali ←

Options:
\footnote{See \url{https://en.wikipedia.org/wiki/Cyrillic_numerals}.}
• **numerals** = western, bengali, or devanagari
• **changecounternumbering** = *true or false*
  
  Use specified numerals for headings and page numbers.

### 6.6 catalan

**Options:**

- **babelshorthands** ← *true or false*
  
  Activates the shorthands \l and \L to type geminated l or L.

**Commands:**

- \l.l and \L.L ← can be used to type a geminated l, as in *collaborar*, similar to babel (the glyph U+00B7 MIDDLE DOT is used as a geminating sign).

### 6.7 chinese ←

**Options:**

- **variant** = simplified (= cn), or traditional (= tw)
- **numerals** = arabic or chinese
  
  Uses either Arabic numerals or Chinese ideographic numbering.

**Commands:**

- \chinesenumeral (see section 8.3).

### 6.8 croatian

**Options:**

- **babelshorthands** ← *true or false*
  
  If this is turned on, the following shorthands for fine-tuning hyphenation and micro-typography of Croatian words are activated.

  - "| disables a ligature at this position.
  - "=" for an explicit hyphen with a breakpoint, allowing for hyphenation at the other points preset in the hyphenation patterns (as opposed to plain `-`).
  - "~ for a hyphen sign without a breakpoint. Useful for cases where the hyphen should stick at the following syllable.
  - "- adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to `\`).
  - "" allows for a line break at this position (without hyphenation sign).
  - "/ a slash that allows for a subsequent line break. As opposed to \slash, hyphenation at the breakpoints preset in the hyphenation patterns is still allowed.
Furthermore, the following shorthands generate easy access to Croatian digraphs:

"dz" Generates the digraph dž if the font provides it. If not, the two consecutive glyphs are output mimicking the digraph. Also available for "DZ (Dž).

"lj" Generates the digraph lj if the font provides it. If not, the two consecutive glyphs are output mimicking the digraph. Also available for "LJ (Lj).

"nj" Generates the digraph nj if the font provides it. If not, the two consecutive glyphs are output mimicking the digraph. Also available for "NJ (Nj).

Finally, there are also four shorthands for quotation marks:

"" for Croatian left double quotes (".).

"'" for Croatian right double quotes ("').

">" for Croatian left guillemets (»).

"<" for Croatian right guillemets («).

\[\text{disabledigraphs} \leftarrow \text{true or false}\]

If this is true, all Croatian digraphs (such as dž) will be replaced by the two consecutive letters, which is the most common way of typesetting them in Croatian. This can be useful if the Unicode digraphs in your font are broken (if the font does not have them, they are automatically mimicked by the two consecutive glyphs).

\[\text{localalph} \leftarrow \text{true or false}\]

If true, alphanumeric counters will use a locally established version which excludes the characters ⟨q⟩, ⟨w⟩, ⟨x⟩ and ⟨y⟩ from alphabetic counting. Obviously this limits the counting range to 22.

\[\text{split-hyphens} \leftarrow \text{true or false}\]

According to Croatian typesetting conventions, if a word with a hard hyphen (such as hrvatsko-engleski) is hyphenated at this hyphen, a second hyphenation character is to be inserted at the beginning of the line that follows the hyphenation (hrvatsko-/engleski). By default, this is done automatically (if you are using LuaTEx, the luavlina package is loaded to achieve this). Set this option to false to disable the feature.

### 6.9 czech

**Options:**

\[\text{babelshorthands} \leftarrow \text{true or false}\]

\(_\text{v1.45}\)

\(^{6}\)Up to version 1.53, the option was called disableligatures. The old option is kept for backwards compatibility, but the use is discouraged.
If this is turned on, the following shorthands for Czech are activated:

"=" for an explicit hyphen sign which is repeated at the beginning of the next line when hyphenated, as common in Czech typesetting (only needed with \texttt{\textbackslash splitthyphens}=false).

"' for Czech left double quotes (‘).

"' for Czech right double quotes (’).

"> for Czech left double guillemets (»).

"< for Czech right double guillemets («).

\textbullet \texttt{\textbackslash splitthyphens} \leftarrow = \texttt{\textbackslash true} or \texttt{\textbackslash false}

According to Czech typesetting conventions, if a word with a hard hyphen (such as je-li) is hyphenated at this hyphen, a second hyphenation character is to be inserted at the beginning of the line that follows the hyphenation (je-/-li). By default, this is done automatically \leftarrow (if you are using \LaTeX, the \texttt{luavlna} package is loaded to achieve this). Set this option to \texttt{\textbackslash false} to disable the feature.

\textbullet \texttt{\textbackslash vlna} \leftarrow = \texttt{\textbackslash true} or \texttt{\textbackslash false}

According to Czech typesetting conventions, single-letter words (non-syllable prepositions) must not occur at line ends. \texttt{Polyglossia} takes care of this automatically by default \leftarrow (if you are using \LaTeX, the \texttt{luavlna} package is loaded to achieve this). Set this option to \texttt{\textbackslash false} to disable the feature.

\section*{6.10 dutch}

Options:

\textbullet \texttt{\textbackslash babelshorthands} \leftarrow = \texttt{\textbackslash true} or \texttt{\textbackslash false}

If this is turned on, the following shorthands defined for fine-tuning hyphenation and micro-typography of Dutch words are activated:

"- adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to \texttt{-} in default \LaTeX).

"~ for a hyphen sign without a breakpoint. Useful for cases where the hyphen should stick at the following syllable.

"| disables a ligature at this position.

"| allows for a line break at this position (without hyphenation sign).

"/ a slash that allows for a subsequent line break. As opposed to \texttt{\textbackslash stash}, hyphenation at the breakpoints preset in the hyphenation patterns is still allowed.

\texttt{\textbackslash -} In addition, the macro \texttt{\textbackslash -} is redefined to allow hyphens in the rest of the word (equivalent to \texttt{"-}).
6.11  english

Options:
- variant = american (= us), usmax (same as american but with additional hyphenation patterns), british (= uk), australian, canadian ←, or newzealand
- ordinalmonthday = *true or false
  The default value is true for variant=british.

6.12  esperanto

Commands:
- \hodiau and \hodiaun are special forms of \today. The former produces the date in Esperanto preceded by the article (la), which is the most common date format. The latter produces the same date format in accusative case.

6.13  finnish

Options:
- babelshorthands ← = *true or false
  If this is turned on, the following shorthands for fine-tuning hyphenation and micro-typography of Finnish words are activated:
  
  "- adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to \-).
  
  "~ for a hyphen sign without a breakpoint. Useful for cases where the hyphen should stick at the following syllable.
  
  "| disables a ligature at this position.
  
  "\ allows for a line break at this position (without hyphenation sign).
  
  "/ a slash that allows for a subsequent line break. As opposed to \slash, hyphenation at the breakpoints preset in the hyphenation patterns is still allowed.

- schoolhyphens ← = *true or false
  If this is set to true, alternative (experimental) hyphenation patterns are used rather than the default Finnish patterns. These (so-called ‘School’) patterns allow hyphenation at all valid points, including hyphenation points that are considered sub-optimal from an ortho-typographic point of view (e.g., hyphenation between two vowels). The default patterns try to prevent such hyphenation, with the drawback that simple words are sometimes not being hyphenated at points where this would be valid. See https://github.com/hyphenation/basic-finnish for details.
6.14 french

Options:

- **variant** = *french* or *canadian* (= acadian) ← *swiss* ←

  Currently, the only difference between the four variants is that *swiss* uses thincolonspace=true by default since this conforms to the Swiss conventions.

- **autospacing** ← *true* or *false*

  One of the most distinct features of French typography is the addition of extra spacing around punctuation and quotation marks (guillemets). By default, polyglossia adds these spaces automatically, so you don’t need to enter them. This option allows you to switch this feature off globally.

- **thincolonspace** ← *true* or *false*

  With variant=swiss, the default value is true. If false, a full (non-breaking) interword space is inserted before a colon. If true, a thinner space – as before ; , !, and ? – is used. Note that this option must be set after the variant option.

- **autospaceguillemets** ← *true* or *false*

  If you only want to disable the automatic addition of spacing after opening and before closing guillemets (and not at punctuation), set this to false. Note that the more general option autospacing overrides this.

- **autospacetypewriter** ← *true* or *false*

  By default, automatic spacing is disabled in typewriter font. If this is enabled, spacing in typewriter context is the same as with roman and sans serif font, depending on the autospacing and autospaceguillemets settings (note that this was the default up to v. 1.44).

- **frenchfootnote** ← *true* or *false*

  If true, footnotes start with a non-superscripted number followed by a dot, as common in French typography. Note that this might interfere with the specific footnote handling of classes or packages. Also note that this option is only functional (by design) if French is the main language.

- **frenchitemlabels** ← *true* or *false*

  If true, itemize item labels use em-dashes throughout, as common in French typography. Note that this option is only functional (by design) if French is the main language. Also, it might interfere with list packages such as enumitem.

- **frenchpart** ← *true* or *false*

  By default, polyglossia modifies part headings to match French conventions (Première partie rather than Partie I). Next to the standard classes,

---

1Up to version 1.44, the option was called automaticspacesaroundguillemets. For backwards compatibility reasons, the more verbose old option is still supported.

2Babel’s syntax OriginalTypewriter is also supported.
specifc of KOMA-script, memoir and the titlesec package are taken into account. With other classes or packages, redefinition might fail if these have particular part settings. In such case, or if you don’t want the re-definition, you can switch off the feature by passing \texttt{false} to this option.

- **itemlabels** ← \texttt{\langle\text{code}\rangle} (default value: \texttt{\textemdash})
  If \texttt{frenchitemlabels} is true, you can customize here the used item label of all levels.

- **itemlabeli** ← \texttt{\langle\text{code}\rangle} (default value: \texttt{\textemdash})
  If \texttt{frenchitemlabels} is true, you can customize here the used item label of the first level.

- **itemlabelii** ← \texttt{\langle\text{code}\rangle} (default value: \texttt{\textemdash})
  If \texttt{frenchitemlabels} is true, you can customize here the used item label of the second level.

- **itemlabeliii** ← \texttt{\langle\text{code}\rangle} (default value: \texttt{\textemdash})
  If \texttt{frenchitemlabels} is true, you can customize here the used item label of the third level.

- **itemlabeliv** ← \texttt{\langle\text{code}\rangle} (default value: \texttt{\textemdash})
  If \texttt{frenchitemlabels} is true, you can customize here the used item label of the fourth level.

**Commands:**

- **\NoAutoSpacing** ← \texttt{\langle\text{code}\rangle} disallows automatic spacing around punctuation and quotation marks in all following text. The command can also be used locally if braces are used for grouping: \texttt{\{\NoAutoSpacing \texttt{foo:bar}\}}

- **\AutoSpacing** ← \texttt{\langle\text{code}\rangle} enables automatic spacing around punctuation and quotation marks in all following text. The command can also be used locally if braces are used for grouping: \texttt{\{\AutoSpacing \texttt{regarde!}\}}

**6.15 gaelic** ←

**Options:**

- **\texttt{variant = irish or scottish}**

**6.16 georgian** ←

**Options:**

- **\texttt{babelshorthand = *true or false}**
  If this is turned on, the following shorthands are activated:

  
  "- adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to \texttt{-}).

  "= adds an explicit hyphen with a breakpoint, allowing for hyphenation at the other points preset in the hyphenation patterns (as opposed to
plain -).

"~ for a hyphen sign without a breakpoint. Useful for cases where the hyphen should stick at the following syllable.

" | disables a ligature at this position.

" " allows for a line break at this position (without hyphenation sign).

"," thin space for initials with a breakpoint in following surname.

" " for German-style left double quotes (looks like „).  

" " for German-style right double quotes (looks like “).  

"< for French-style left double quotes (looks like «).  

" > for French-style right double quotes (looks like »).  

There are also three shorthands for the Cyrillic dash (тире), which is shorter than the emdash but longer than the endash (namely 0.8 em). Note that, since it is not covered by unicode, this character is faked by telescoping two endashes:

"--- Cyrillic dash for the use in normal text. This requires preceding space in input (trailing space is optional) and prints with a non-breakable thin space before and after the dash.

"--- Cyrillic dash for the use in compound names (surnames). As opposed to "--- this removes any space before and after the dash.

"--- Cyrillic dash for denoting direct speech. This adds a larger space after the dash. Space before the dash is output as is.

- **numerals** = *arabic* or *georgian*
  Uses either Arabic numerals or Georgian alphanumerical numbering.

- **oldmonthnames** = *true* or *false*
  Uses traditional Georgian month names.

### 6.17 german

**Options:**

- **variant** = *german*, *austrian*, or *swiss*
  Setting variant=austrian or variant=swiss uses some lexical variants. With spelling=old, variant=swiss furthermore loads specific hyphenation patterns.

- **spelling** = *new* (= 1996) or *old* (= 1901)
  Indicates whether hyphenation patterns for traditional (1901) or reformed (1996) orthography should be used. The latter is the default.

- **babelshorthands** = *true* or *false*
  If this is turned on, all shorthands defined in babel for fine-tuning hyphenation and micro-typography of German words are activated.

v1.33.4
"ck" for ck to be hyphenated as k-k (1901 spelling).

"ff" for ff to be hyphenated as ff-f (1901 spelling); this is also available for the letters l, m, n, p, r and t.

"|" disables a ligature at this position (e.g., Auf"|lage).

"=" for an explicit hyphen with a breakpoint, allowing for hyphenation at the other points preset in the hyphenation patterns (as opposed to plain -).

"~" for a hyphen sign without a breakpoint. Useful for cases where the hyphen should stick at the following syllable, e.g., bergauf und "~ab.

"-" adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to \-).

"=" allows for a line break at this position (without hyphenation sign); e.g., (pseudo"=")"wissenschaftlich.

"/" a slash that allows for a subsequent line break. As opposed to \slash, hyphenation at the breakpoints preset in the hyphenation patterns is still allowed.

There are also four shorthands for quotation signs:

"" for German-style left double quotes («)

"'" for German-style right double quotes (»)

"<" for French-style left double quotes («)

">" for French-style right double quotes (»).

\script \leftarrow \text{l}atin \text{or} \text{blackletter} \leftarrow (= \text{fraktur})

Setting \script=blackletter adapts the captions for typesetting German in blackletter type (using the long s (ſ) where appropriate).

6.18 greek

Options:

\hspace{1em} • \textit{variant} = \textit{monotonic} (= \textit{mono}), \textit{polytonic} (= \textit{poly}), or \textit{ancient}
\hspace{1em} • \textit{numerals} = \textit{greek} or \textit{arabic}
\hspace{1em} • \textit{attic} = *\text{true} or \text{false}

Commands:

\hspace{1em} • \textbackslash{Greeknumber} and \textbackslash{greeknumber} (see section 8.3).
\hspace{1em} • The command \textbackslash{atticnumeral} (= \textbackslash{atticnum}) (activated with the option \texttt{attic=true}), displays numbers using the acrophonic numbering system (defined in the Unicode range U+10140–U+10174).\footnote{See the documentation of the \texttt{xgreek} package for more details.}
6.19 hebrew

Options:

- **numerals** = hebrew or arabic
- **calendar** = hebrew or gregorian
- **marcheshvan** = *true or false
  
  If true, the second month of the civil year will be output as מְרָכֶשֶׁן (Marcheshvan) rather than חָשָׁן (Heshvan), which is the default.

- **fullyear** ← *true or false
  
  Causes years from the current millennium to be printed with the thousands digit (he-tav-shin-samekh-gimel). Without this option, thousands are not printed for the current millennium.

- **transliteration** ← academy or alt
  
  With value academy, transliteration follows the recommendations of the Hebrew Language Academy. The default (alt) uses the received settings of babel (hebcal) and polyglossia (hebrewcal).

Commands:

- \hebrewnumeral (see section 8.3).
- \hebrewalph (see section 6.2).

6.20 hindi ←

Options:

- **numerals** = western or devanagari

6.21 hungarian

Options:

- **swapstrings** ← *all, captions, headings, headers, hheaders, or none
  
  In Hungarian, some caption strings need to be in a different order than in other languages (e.g., 1. fejezet instead of Chapter 1). By default, polyglossia tries hard to provide the correct order for different classes and packages (standard classes, KOMA-script, memoir, and titlesec package should work, as well as fancyhdr and caption). However, since the definition of these strings is not standardized, the redefinitions might not work and even interfere badly if you use specific classes or packages that redefine the respective strings themselves. In this case, you can disable some or all changes. The possibilities are:
    - all: Redefine figure and table captions, part and chapter headings, and running headers (= default setting)
    - captions: Redefine figure and table captions only
    - headings: Redefine part and chapter headings only
headers: Redefine running headers only

hheaders: Redefine part and chapter headings as well as running headers

none: Do not redefine anything

forceheadingpunctuation ← = *true or false

Section numbers always have a trailing punctuation in Hungarian (as in 1.1. as opposed to 1.1). For compatibility reasons, the default option is false, thus polyglossia does not touch heading punctuation, so this will be whatever the class or a package determines. Set this option to true, and polyglossia appends a period after the section counters, and adjusts the header punctuation (as in 1. fejezet. as opposed to 1. fejezet).

Commands:

\ontoday (= \ondatehungarian): special form of \today which produces a slightly different date format as used in prepositional phrases (such as ‘on February 10th’) in Hungarian.

6.22 italian

Options:

babelshorthands ← = *true or false

Activates the " character as a switch to perform etymological hyphenation when followed by a letter. Furthermore, the following shorthands are activated:

" “ double raised open quotes (the Italian keyboard misses the backtick).
"< open guillemet (looks like «).
"> closing guillemet (looks like »).
"/ a slash that allows for a subsequent line break. As opposed to \slash, hyphenation at the breakpoints preset in the hyphenation patterns is still allowed.
"- adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to \-).

6.23 korean ←

Options:

variant = plain, classic, or modern

These variants control spacing before/after CJK punctuations.

plain: Do nothing
• classic: Suitable for text with no interword spaces. This option forces CJK punctuations to half-width, and inserts half-width glue around them.
• modern: Suitable for text with interword spaces. This option forces CJK punctuations to half-width, and inserts small (half of interword space) glue around them.
  • captions = hangul or hanja
  • swapstrings ← = *all, headers, headings, or none
  With this option, Korean-style part and chapter headings, and running headers are available. It is similar to Hungarian (see 6.21) except that figure and table captions are not touched.
  • all: Redefine part and chapter headings, and running headers (= default setting)
  • headings: Redefine part and chapter headings only
  • headers: Redefine running headers only
  • none: Do not redefine anything

6.24 kurdish ←

Options:
• variant = kurmanji or sorani
• script = Arabic or Latin
  Defaults are Arabic for Sorani and Latin for Kurmanji.
• numerals = western or eastern
  Defaults are western for Latin and eastern for Arabic script, depending on the selection above.
• abjadimnotail = *true or false
  Set this to true if you want the abjad form of the number three to be ج – as in the manuscript tradition – instead of the modern usage ٣.

Commands:
  • \ontoday: special form of \today which produces a slightly different date format as used in prepositional phrases (as in ‘on February 10th’). Only available for Latin script.
  • \abjad (see section 8.3)
  • \aemph (see section 6.2)

6.25 lao ←

Options:
• numerals = lao or arabic
**Table 4.** Spelling differences between the Latin language variants.

The capitalization of month names and the use of *i/j* may be affected by the capitalizemonth and the usej option.

<table>
<thead>
<tr>
<th></th>
<th>classic</th>
<th>medieval</th>
<th>modern</th>
<th>ecclesiastic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ianuarii</td>
<td>Ianuarii</td>
<td>Ianuarii</td>
<td>Ianuarii</td>
<td>ianuarii</td>
</tr>
<tr>
<td>Nouembris</td>
<td>Nouembris</td>
<td>Novembris</td>
<td>novembris</td>
<td></td>
</tr>
<tr>
<td>Praefatio</td>
<td>Praefatio</td>
<td>Praefatio</td>
<td>Praefatio</td>
<td></td>
</tr>
</tbody>
</table>

\MakeUppercase{Iulius} yields:

<table>
<thead>
<tr>
<th></th>
<th>classic</th>
<th>modern</th>
<th>ecclesiastic</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVLIVS</td>
<td>IVLIVS</td>
<td>IULIUS</td>
<td>IULIUS</td>
</tr>
</tbody>
</table>

### 6.26 latin

**Options:**

- **variant** = classic, medieval, modern, or ecclesiastic

  These variants refer to different spelling conventions. The classic and the medieval variant do not use the letters *U* and *v*, but only *V* and *u*. This concerns predefined terms like month names as well as the behaviour of the \MakeUppercase and the \MakeLowercase command. The medieval and the ecclesiastic variant use the ligatures æ and œ. See table 4 for examples.

  Furthermore, the ecclesiastic variant takes care for a punctuation spacing similar to French, but with smaller spaces, as provided for PDF\TeX{} by the ecclesiastic package.

- **hyphenation** = classic, modern, or liturgical

  There are three different sets of hyphenation patterns for Latin. Separate documentation for them is available on the Internet. Each of the four variants mentioned above has its default set of hyphenation patterns as indicated by table 5. Use the hyphenation option if the default style does not fit your needs. Note that the liturgical hyphenation patterns are the default of none of the language variants. To use them, you have to say hyphenation=liturgical in any case.

- **ecclesiasticfootnotes** = *true* or *false*

  Use footnotes as provided by the ecclesiastic package, which typesets footnotes with ordinary instead of superior numbers and without indentation. As many ecclesiastic documents and liturgical books use footnotes that are very similar to the ordinary \TeX{} ones, we do not use this footnote style as default even for the ecclesiastic variant.

---

\[\text{Refer to https://github.com/gregorio-project/hyphen-la/blob/master/doc/README.md#hyphenation-styles}\]

---

31
Table 5. Latin default hyphenation styles

<table>
<thead>
<tr>
<th>Language variant</th>
<th>Default hyphenation style</th>
</tr>
</thead>
<tbody>
<tr>
<td>classic</td>
<td>classic</td>
</tr>
<tr>
<td>medieval</td>
<td>modern</td>
</tr>
<tr>
<td>modern</td>
<td>modern</td>
</tr>
<tr>
<td>ecclesiastic</td>
<td>modern</td>
</tr>
</tbody>
</table>

Note that this option is only possible if Latin is the main language of your document.

- **usej** ← *true or false*
  Use \textit{j/j} in predefined terms. The letter \textit{j} is not of ancient origin. In early modern times, it was used to distinguish the consonantic \textit{i} from the vocalic \textit{i}. Nowadays, the use of \textit{j} has disappeared from most Latin publications. So \textit{false} is the default value for all four language variants. Use this option if you prefer \textit{Januarii} and \textit{Maji} to \textit{Ianuarii} and \textit{Maii}.

- **capitalizemonth** ← *true or false*
  Capitalize the month name when printing dates (using the \texttt{\today} command). Traditionally, month names are capitalized. However, in recent liturgical books they are lowercase. So \textit{true} is the default value for the variants \textit{classic}, \textit{medieval}, and \textit{modern}, whereas \textit{false} is the default value for the \textit{ecclesiastic} variant.

- **babelshorthands** = *true or false*
  Enable the following shorthands inherited from \texttt{babel-latin} and the \texttt{ecclesiastic} package.

- `<` for « (left guillemet)
- `>` for » (right guillemet)
- `"` If no other shorthand applies, `"` before any letter character defines an optional break point allowing further break points within the same word (as opposed to the `-` command).
- `"` the same as `"`, but also possible before non-letter characters
- `'a` for á (a with acute), also available for é, i, ó, ú, y, à, and ò
g- `'A` for Á (A with acute), also available for É, Í, Ó, Ú, V, Y, À, and Ò

The following shorthands are only available for the \textit{medieval} and the \textit{ecclesiastic} variant.

- `"ae` for æ (ae ligature), also available for ò
- `"Àe` for Æ (AE ligature), also available for Ò
- `"ÀE` for Æ (AE ligature), also available for Ò
'ae for â (ae ligature with acute), also available for çε
'Ae for Aë (AE ligature with acute), also available for ĖE
'Æ for AÆ (AE ligature with acute), also available for ŒÆ

• prosodicshorthands ← = *true or false

Enable shorthands for prosodic marks (macrons and breves) very similar to those provided by babel-latin using the withprosodicmarks modifier. Note that the active = character used for macrons will cause problems with commands using key=value interfaces, such as the command \includegraphics[height=2]{...}. Use \shorthandoff{=} before such commands (and \shorthandon{=} thereafter) within every environment with prosodic shorthands enabled.

The following shorthands are available.

=a for â (a with macron), also available for ē, ī, ŏ, ŭ, and ĭ
=Â for Ă (A with macron), also available for Ė, Ī, Ō, Ū, V̄, and Ȳ. Note that a macron above the letter V is only displayed if your font supports the Unicode character 0304 (combining macron).

=ae for aë (ae diphthong with macron, for the classic and the modern variant) or æ (ae ligature with macron, for the medieval and the ecclesiastic variant), respectively; also available for āu, ēu, and ŏe/œ̄. Note that macrons above diphthongs are only displayed if your font supports the Unicode character 035E (combining double macron).

=Æ for AÆ (Ae diphthong with macron, for the classic and the modern variant) or Æ (AE ligature with macron, for the medieval and the ecclesiastic variant), respectively; also available for āU, ĖU, and ŒU/Œ.

^a for â (a with breve), also available for ē, ī, ŏ, ŭ, and ţ. Note that a breve above the letter y is only displayed if your font supports the Unicode character 0306 (combining breve).

^Â for Â (A with breve), also available for Ė, Ī, Ō, Ū, V̄, and Ȳ. Note that breves above the letters V and Y are only displayed if your font supports the Unicode character 0306 (combining breve).

6.27 Malay

Options:

• variant ← = indonesian or malaysian
6.28 marathi

Options:

- **numerals** = *devanagari* or *western*

6.29 mongolian

Currently, only the Khalkha variety in Cyrillic script is supported.

Options:

- **babelshorthands** = *true* or *false*

  If this is turned on, the following shorthands are activated:

  - `-` adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to `-`).
  - `=` adds an explicit hyphen with a breakpoint, allowing for hyphenation at the other points preset in the hyphenation patterns (as opposed to plain `-`).
  - `~` for a hyphen sign without a breakpoint. Useful for cases where the hyphen should stick at the following syllable.
  - `|` disables a ligature at this position.
  - `"` allows for a line break at this position (without hyphenation sign).
  - `,` thinspace for initials with a breakpoint in following surname.
  - `""` for German-style left double quotes (looks like „).
  - `""` for German-style right double quotes (looks like ”).
  - `<` for French-style left double quotes (looks like «).
  - `>` for French-style right double quotes (looks like »).

There are also three shorthands for the Cyrillic dash (тире), which is shorter than the emdash but longer than the endash (namely 0.8 em). Note that, since it is not covered by unicode, this character is faked by telescoping two endashes:

  - `---` Cyrillic dash for the use in normal text. This requires preceding space in input (trailing space is optional) and prints with a non-breakable thin space before and after the dash.
  - `--` Cyrillic dash for the use in compound names (surnames). As opposed to `---` this removes any space before and after the dash.
  - `--` Cyrillic dash for denoting direct speech. This adds a larger space after the dash. Space before the dash is output as is.
* **numerals = arabic, cyrillic-alph or cyrillic-trad**
  Uses either Arabic numerals or Cyrillic alphanumerical numbering. The two Cyrillic variants differ as follows:
  - cyrillic-alph steps through the Cyrillic alphabet. Thus it can only be used up to 30.
  - cyrillic-trad (= cyrillic) uses a traditional Cyrillic alphanumeric system.\(^{11}\) It supports numbers up to 999 999.

**Commands:**
- \texttt{\textasciitilde Asbuk}: produces uppercased Cyrillic alphanumerals, for environments such as \texttt{enumerate}. It steps through the Cyrillic alphabet and thus it can only be used up to 30. The command takes a counter as argument, \textit{e.g.}, \texttt{\textasciitilde textmongolian(\texttt{Asbuk(section)})} produces Т.
- \texttt{\textasciitilde asbuk}: same as \texttt{\textasciitilde Asbuk} but in lowercase.
- \texttt{\textasciitilde AsbukTrad}: same as \texttt{\textasciitilde Asbuk} but using the traditional Cyrillic alphanumeric numbering which supports numbers up to 999 999. \textit{E.g.}, \texttt{\textasciitilde textmongolian(\texttt{AsbukTrad(section)})} produces С.
- \texttt{\textasciitilde asbukTrad}: same as \texttt{\textasciitilde AsbukTrad} but in lowercase.

6.30 norwegian

**Options:**
- \texttt{variant} \leftarrow \texttt{bokmal or nynorsk}

6.31 persian

**Options:**
- \texttt{numerals = western or eastern}
- \texttt{abjadimnotail} \leftarrow \texttt{*true or false}
  Set this to \texttt{true} if you want the \texttt{abjad} form of the number three to be \(\text{٣} \) – as in the manuscript tradition – instead of the modern usage \(\text{۳}\).

**Commands:**
- \texttt{\textasciitilde abjad} (see section 8.3)
- \texttt{\textasciitilde a emph} (see section 6.2).

6.32 polish

**Options:**
- \texttt{babelshorthands} \leftarrow \texttt{*true or false}
  If this is turned on, the following shorthands for Polish are activated:

"=" for an explicit hyphen sign which is repeated at the beginning of the next line when hyphenated, as common in Polish typesetting (also if \texttt{splithyphens=false}). Unlike plain -, this also allows for hyphenation at the other points preset in the hyphenation patterns.

"| disables a ligature at this position.

"~ for a hyphen sign without a breakpoint. Useful for cases where the hyphen should stick at the following syllable.

" - adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to \-).

" " allows for a line break at this position (without hyphenation sign).

"/ a slash that allows for a subsequent line break. As opposed to \texttt{\slash}, hyphenation at the breakpoints preset in the hyphenation patterns is still allowed.

" for Polish left double quotes (looks like „).

"' for Polish right double quotes (looks like ”).

"< for French left double guillemets (looks like « – used in Polish as second level quotes).

"> for French right double guillemets (looks like »).

\begin{itemize}
\item \texttt{splithyphens \textless= *true or false} \\
According to Polish typesetting conventions, if a word with a hard hyphen (such as \textit{czerwono-złote}) is hyphenated at this hyphen, a second hyphenation character is to be inserted at the beginning of the line that follows the hyphenation (\textit{czerwono-/-złote}). By default, this is done automatically (if you are using Lua\TeX, the \texttt{luavlna} package is loaded to achieve this). Set this option to \texttt{false} to disable the feature.

\item \texttt{vlna \textless= *true or false} \\
According to Polish typesetting conventions, single-letter words (non-syllable prepositions) must not occur at line ends. Polyglossia takes care of this automatically by default (if you are using Lua\TeX, the \texttt{luavlna} package is loaded to achieve this). Set this option to \texttt{false} to disable the feature.
\end{itemize}

\section*{6.33 portuguese}
\textbf{Options:}
\begin{itemize}
\item \texttt{variant \textless= brazilian or portuguese} \\
\item \texttt{babelshorthands \textless= *true or false} \\
If this is turned on, the following shorthands for fine-tuning hyphenation and micro-typography of Portuguese words are activated.

"| disables a ligature at this position.
"=" for an explicit hyphen sign which is repeated at the beginning of the next line when hyphenated, as common in Portuguese typesetting (also if `splithyphens=false`). Unlike plain `-`, this also allows for hyphenation at the other points preset in the hyphenation patterns.

"~" for a hyphen sign without a breakpoint. Useful for cases where the hyphen should stick at the following syllable.

"-" adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to `\-`).

"=" allows for a line break at this position (without hyphenation sign).

"/" a slash that allows for a subsequent line break. As opposed to `\slash`, hyphenation at the breakpoints preset in the hyphenation patterns is still allowed.

"<" for French left guillemets («).

">" for French right guillemets (»).

- **splithyphens** ← = *true* or *false*
  According to Portuguese typesetting conventions, if a word with a hard hyphen (such as `pára-brisas`) is hyphenated at this hyphen, a second hyphenation character is to be inserted at the beginning of the line that follows the hyphenation (`pára-/-brisas`). By default, this is done automatically (if you are using LuaTeX, the `luavlna` package is loaded to achieve this). Set this option to *false* to disable the feature.

### 6.34 punjabi ←

**Options:**
- **numerals** = western or *gurmukhi*

### 6.35 russian

**Options:**
- **babelshorthands** = *true* or *false*
  If this is turned on, the following shorthands are activated:

  "-" adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to `\-`).

  "=" adds an explicit hyphen with a breakpoint, allowing for hyphenation at the other points preset in the hyphenation patterns (as opposed to plain `-`).

  "~" adds an explicit hyphen without a breakpoint. Useful for cases where the hyphen should stick at the following syllable.

  "|" disables a ligature at this position.
"" allows for a line break at this position (without hyphenation sign).

There are also three shorthands for the Cyrillic dash (тире), which is shorter than the emdash but longer than the endash (namely 0.8 em). Note that, since it is not covered by unicode, this character is faked by telescoping two endashes:

"--- Cyrillic dash for the use in normal text. This requires preceding space in input (trailing space is optional) and prints with a non-breakable thin space before and after the dash.

"--~ Cyrillic dash for the use in compound names (surnames). As opposed to "--- this removes any space before and after the dash.

"--* Cyrillic dash for denoting direct speech. This adds a larger space after the dash. Space before the dash is output as is.

‣ forceheadingpunctuation ← *true or false
By default, chapter and section numbers always have a trailing punctuation in Russian (as in 1.1. as opposed to 1.1). If this option is set to false, polyglossia will not touch heading punctuation, so this will be whatever the class or a package determines.

‣ indentfirst ← *true or false
By default, all paragraphs are indented in Russian, also those after a chapter or section heading. If this option is false, the latter paragraphs are not indented, as normal in \LaTeX.

‣ mathfunctions ← *true or false
By default, some specific math macros are defined for Russian (see below). In order to prevent command clashes (e.g., with the chemformula package), you can switch these definitions off by passing false to this option.

‣ spelling = modern or old
This option is for captions and date only, not for hyphenation.

‣ numerals = arabic, cyrillic-alph or cyrillic-trad
Uses either Arabic numerals or Cyrillic alphanumerical numbering. The two Cyrillic variants differ as follows:
  › cyrillic-alph steps through the Cyrillic alphabet. Thus it can only be used up to 30.
  › cyrillic-trad (= cyrillic) uses a traditional Cyrillic alphanumeric system.\textsuperscript{12} It supports numbers up to 999 999.

**Commands:**

\Asbuk
  › \Asbuk: produces uppercased Cyrillic alphanumerals, for environments such as enumerate. It steps through the Cyrillic alphabet and thus it can

\textsuperscript{12}See https://en.wikipedia.org/wiki/Cyrillic_numerals.
only be used up to 30. The command takes a counter as argument, e.g., \textrussian{\Asbuk{section}} produces \textrussian{Ђ}.

- \asbuk: same as \Asbuk but in lowercase.
- \AsbukTrad: same as \Asbuk but using the traditional Cyrillic alphanumerical numbering which supports numbers up to 999 999.
  E.g., \textrussian{\AsbukTrad{page}} produces \textrussian{ЉѲ}.
- \asbukTrad: same as \AsbukTrad but in lowercase.

If the \mathfunctions option is true, loading Russian defines a few macros than can be used independently of the current language. These are nine macros to be used in math mode to type the names of trigonometric functions common for Russian documents: \sh, \ch, \tg, \ctg, \arctg, \arcctg, \th, \cth, and \cosec. Cyrillic letters in math mode can be typed with the aid of text commands such as \textbf, \textsf, \textit, \texttt, etc. The macros \Prob, \Variance, \\NOD, \\nod, \\NOK, \\nok, \\Proj print some rare Russian mathematical symbols.

6.36 sami ←

Currently support for Sami is limited to Northern Sami.

6.37 sanskrit

Options:

- \script ← = Devanagari, Gujarati, Malayalam, Bengali, Kannada, Telugu, Latin
  The value is passed to fontspec should the respective \langle script\rangle font not be defined. This can be useful if you typeset Sanskrit texts in scripts other than Devanagari.
- \numerals ← = Devanagari or Western

6.38 serbian

Options:

- \script = Cyrillic or Latin
- \splithyphens ← = *true or false
  According to Serbian typesetting conventions, if a word with a hard hyphen (such as калициум-карбонат) is hyphenated at this hyphen, a second hyphenation character is to be inserted at the beginning of the line that follows the hyphenation (калициум/-карбонат). By default, this is done automatically (if you are using Lua\TeX, the luavlna package is loaded to achieve this). Set this option to false to disable the feature.
- \numerals = arabic, cyrillic-alph or cyrillic-trad
  Uses either Arabic numerals or Cyrillic alphanumerical numbering. The two Cyrillic variants differ as follows:
• cyrillic-alph steps through the Cyrillic alphabet. Thus it can only be used up to 30.
• cyrillic-trad (= cyrillic) uses a traditional Cyrillic alphanumeric system. It supports numbers up to 999 999.

Commands:

\Asbuk
• \Asbuk: produces uppercased Cyrillic alphanumerals, for environments such as enumerate. It steps through the Cyrillic alphabet and thus it can only be used up to 30. The command takes a counter as argument, e.g., \textserbian{\Asbuk{section}} produces Ђ.

\asbuk
• \asbuk: same as \Asbuk but in lowercase.

\AsbukTrad
• \AsbukTrad: same as \Asbuk but using the traditional Cyrillic alphanumeric numbering which supports numbers up to 999 999. E.g., \textserbian{\AsbukTrad{page}} produces М.

\asbukTrad
• \asbukTrad: same as \AsbukTrad but in lowercase.

6.39 slovak

Options:

• babelshorthands ← *true or false

If this is turned on, the following shorthands for Slovak are activated:

"= for an explicit hyphen sign which is repeated at the beginning of the next line when hyphenated, as common in Slovak typesetting (also if splithyphens=false). Unlike plain -, this also allows for hyphenation at the other points preset in the hyphenation patterns.

"| disables a ligature at this position.

"~ for a hyphen sign without a breakpoint. Useful for cases where the hyphen should stick at the following syllable.

"- adds a hyphenation point that does still allow for hyphenation at the points preset in the hyphenation patterns (as opposed to \\-).

"\ allows for a line break at this position (without hyphenation sign).

"/ a slash that allows for a subsequent line break. As opposed to \slash, hyphenation at the breakpoints preset in the hyphenation patterns is still allowed.

"' for Slovak left double quotes (looks like „).

"" for Slovak right double quotes (looks like “).

"> for Slovak left double guillemets (looks like »).

"< for Slovak right double guillemets (looks like «).
According to Slovak typesetting conventions, if a word with a hard hyphen (such as je-li) is hyphenated at this hyphen, a second hyphenation character is to be inserted at the beginning of the line that follows the hyphenation (je-/-li). By default, this is done automatically (if you are using Lua\TeX, the luavlna package is loaded to achieve this). Set this option to false to disable the feature.

According to Slovak typesetting conventions, single-letter words (non-syllable prepositions) must not occur at line ends. Polyglossia takes care of this automatically by default (if you are using Lua\TeX, the luavlna package is loaded to achieve this). Set this option to false to disable the feature.

### 6.40 slovenian

**Options:**

- **localalph** ← *true or false
  
  If true, alphanumeric counters will use a localized version including characters with caron (a, b, c, č, d, …) and excluding the characters ⟨q⟩, ⟨w⟩, ⟨x⟩ and ⟨y⟩ from alphabetic counting.

### 6.41 sorbian

**Options:**

- **variant** ← lower or upper
- **olddate** ← *true or false

If true, \today will use traditional Sorbian month names (i.e., it will be synonymous to \oldtoday below).

**Commands:**

- \oldtoday: outputs the current date using traditional Sorbian month names, even if olddate is false.

### 6.42 spanish

**Options:**

- **variant** ← *spanish or mexican
- **spanishoperators** ← *all, accented, spaced, none, or false

Determines of and how math operators are localized to Spanish.

- accented causes some math operators to use accents where usual in Spanish (lim, lim sup, lim inf, máx, min, inf, mód).

• spaced causes some math operators to use spaces where usual in Spanish (arc cos, arc sen, arc tg).
• all activates accented and spaced and furthermore provides Spanish localizations of \sin (sen), \tan (tg), \sinh (senh), and \tanh (tgh).
• none does no localization at all (default setting).

Commands:

\arcsen: alias to \arcsin (babel compatibility)
\arctg: alias to \arctan (babel compatibility)
\sen: alias to \sin (babel compatibility)
\senh: alias to \sinh (babel compatibility)
\tg: alias to \tan (babel compatibility)
\tgh: alias to \tanh (babel compatibility)
\spanishoperator: allows you to define further localized operators. For instance, \spanishoperator{cotg} defines a command \cotg that outputs cotg in math. The optional argument of the command lets you specify the spelling, if needed, e.g., \spanishoperator{arc\,ctg}{arcctg}.

6.43 syriac

Options:

• numerals ← western (i.e., 1234567890), eastern (for which the Oriental Arabic numerals are used: ٠١٢٣٤٥٦٧٨٩٠), or abjad

Commands:

\abjadsyriac (see section 8.3)
\aemph (see section 6.2).

6.44 thai

Options:

• numerals = thai or arabic
To insert word breaks, you need to use an external processor. See the documentation to thai-latex and the file testthai.tex that comes with this package.

6.45 tibetan

Options:

• numerals = tibetan or arabic
6.46 ukrainian

Options:

‣ babelshorthands = *true or false
   If this is turned on, the following shorthands are activated:
   "-  adds a hyphenation point that does still allow for hyphenation at the
       points preset in the hyphenation patterns (as opposed to \-).
   
   "=  adds an explicit hyphen with a breakpoint, allowing for hyphenation
       at the other points preset in the hyphenation patterns (as opposed to
       plain -).
   
   "~  for a hyphen sign without a breakpoint. Useful for cases where the
       hyphen should stick at the following syllable.
   
   "|  disables a ligature at this position.
   
   " "  allows for a line break at this position (without hyphenation sign).
   
   There are also three shorthands for the Cyrillic dash (тире), which is
   shorter than the emdash but longer than the endash (namely 0.8 em). Note
   that, since it is not covered by unicode, this character is faked by telescop-
   ing two endashes:
   "---  Cyrillic dash for the use in normal text. This requires preceding
       space in input (trailing space is optional) and prints with a non-
       breakable thin space before and after the dash.
   
   "--  Cyrillic dash for the use in compound names (surnames). As op-
        posed to "--- this removes any space before and after the dash.
   
   "--* Cyrillic dash for denoting direct speech. This adds a larger space
       after the dash. Space before the dash is output as is.

‣ mathfunctions ↔ = *true or false
   By default, some specific math macros are defined for Ukrainian (see be-
   low). In order to prevent command clashes (e.g., with the chemformula
   package), you can switch these definitions off by passing false to this op-
   tion.

‣ numerals = arabic, cyrillic-alph or cyrillic-trad
   Uses either Arabic numerals or Cyrillic alphanumerical numbering. The
   two Cyrillic variants differ as follows:
   
   • cyrillic-alph steps through the Cyrillic alphabet. Thus it can only
     be used up to 30.
   
   • cyrillic-trad (= cyrillic) uses a traditional Cyrillic alphanumeric
     system.\textsuperscript{14} It supports numbers up to 999 999.

\textsuperscript{14}See https://en.wikipedia.org/wiki/Cyrillic_numerals.
Commands:

\Asbuk
- \Asbuk: produces uppercased Cyrillic alphanumerals, for environments such as \texttt{enumerate}. It steps through the Cyrillic alphabet and thus it can only be used up to 30. The command takes a counter as argument, e.g., \texttt{\textukrainian{\Asbuk{section}}} produces Ђ.

\asbuk
- \asbuk: same as \Asbuk but in lowercase.

\AsbukTrad
- \AsbukTrad: same as \Asbuk but using the traditional Cyrillic alphanumerical numbering which supports numbers up to 999 999.
  E.g., \texttt{\textukrainian{\AsbukTrad{page}}} produces МД.

\asbukTrad
- \asbukTrad: same as \AsbukTrad but in lowercase.

If the \texttt{mathfunctions} option is \texttt{true}, loading Ukrainian defines a few macros than can be used independently of the current language. These are nine macros to be used in math mode to type the names of trigonometric functions common for Ukrainian documents: \texttt{\sh}, \texttt{\ch}, \texttt{\tg}, \texttt{\ctg}, \texttt{\arctg}, \texttt{\cth}, \texttt{\cth}, and \texttt{\cosec}. Cyrillic letters in math mode can be typed with the aid of text commands such as \texttt{\textbf}, \texttt{\textsf}, \texttt{\textit}, \texttt{\texttt}, etc. The macros \texttt{\Prob}, \texttt{\Variance}, \texttt{\NOD}, \texttt{\nod}, \texttt{\NOK}, \texttt{\nok}, \texttt{\NSD}, \texttt{\nsd}, \texttt{\NSK}, \texttt{\nsk}, \texttt{\Proj} print some rare Ukrainian mathematical symbols.

6.47 uyghur

Options:

- \texttt{chapterformat} ← \texttt{*ordinal, roman, arabic}
  In Uyghur, chapter and part headings usually use ordinals rather than numbers. Alternatively Roman numbers are common as well. By default, \texttt{polyglossia} uses ordinals. This option allows to change this. Choices are:
    - \texttt{ordinal}: Use ordinals for chapter and part headings (= default setting)
    - \texttt{roman}: Use Roman numbering for chapter and part heading.
    - \texttt{arabic}: Use Arabic numbering for chapter and part heading (= \LaTeX default).
  Note that this option only works if \texttt{swapstrings} is set to \texttt{all}, \texttt{headings} or \texttt{headers}. The caveats for that options (see below) apply.

- \texttt{swapstrings} ← \texttt{*all, captions, headings, headers, hheaders, or none}
  In Uyghur, table and figure caption strings need to be in a different order and format than in other languages. By default, \texttt{polyglossia} provides the correct for different classes and packages (standard classes, \texttt{KOMA-script}, \texttt{memoir}, and \texttt{titlesec} package should work, as well as \texttt{fancyhdr} and \texttt{caption}). However, since the definition of these strings is not standardized, the redefinitions might not work and even interfere badly if you use specific classes or packages that redefine the respective strings themselves. In this case, you can disable some or all changes. The possibilities are:
• all: Redefine figure and table captions, part and chapter headings, and running headers (= default setting)
• captions: Redefine figure and table captions only
• headings: Redefine part and chapter headings only
• headers: Redefine running headers only
• hheaders: Redefine part and chapter headings as well as running headers
• none: Do not redefine anything

Commands:
\uyghurord\n\uyghurord: outputs Uyghur ordinals. Supported input: integer numbers in the range of 1–100.
\uyghurord: same as \uyghurord but with counter as input (e.g., \textuyghur{\uyghurord(page)}).

6.48 welsh

Options:
• date = long or short

7 Modifying or extending captions, date formats and language settings

Polyglossia uses the following macros to define language-specific captions (i.e., strings such as “chapter”), date formats and additional language settings (\lang is to be replaces with the respective language name):
\captions{\lang} \captions{\lang} stores definitions of caption strings (such as, in the case of English, \defchaptername{Chapter})
\date{\lang} \date{\lang} stores definitions of date formats (usually redefinitions of \today, in some cases also definitions of additional date commands)
\blockextras{\lang} \blockextras{\lang} stores macros that are to be executed when the language (\lang) is activated via \selectlanguage command or the (\lang) environment
\inlineextras{\lang} \inlineextras{\lang} stores macros that are to be executed when the language (\lang) is activated locally via \text{\lang} command
\noextras{\lang} \noextras{\lang} stores macros that are to be executed when the language (\lang) is closed

In order to redefine internal macros, we recommend to use the command \gappto. For compatibility with babel the command \addto is also available to the same effect. For instance, to change the \chaptername for language lingua, you can do this:
Note that this needs to be done after the respective language has been loaded with \setmainlanguage or \setotherlanguage.

Specifically for package authors, analogous commands are provided which are only executed if a specific language variety is used. As opposed to the macros above, these refer to babel names. Other than that, the function is identical:

- \captions@bbl@⟨babelname⟩
- \date@bbl@⟨babelname⟩
- \blockextras@bbl@⟨babelname⟩
- \inlineextras@bbl@⟨babelname⟩
- \noextras@bbl@⟨babelname⟩

By default, these macros are undefined. If they are defined (e.g., by an external package), they will be executed after their respective ⟨lang⟩ counterpart and thus can be used to overwrite definitions of the former. Again, use \gappto to define/modify these macros. For instance, to add a new caption \footnotename to the Swiss variety of German (babel name nswissgerman), you can do this:

\gappto\captions@bbl@nswissgerman{\def\footnotename{Fussnote}}

If you do this in a document preamble rather than in a package, you need to embrace the redefinition by \makeatletter and \makeatother due to the @ in the macro names.

Finally, as soon as the language has been switched (either inline or as a block), polyglossia executes the (by default empty) hook

\polyglossia@language@switched
to which you can append arbitrary code (via \gappto) that should be executed if (a particular) language is being activated. This is done before any of the above macros are issued (so you can still alter them), but at a point where \languagename, \babelname and \languageid are already set, so you can condition on specific languages in your code. This hook is particularly provided for package authors.

### 8 Script-specific numbering

Languages and scripts have specific numbering conventions. Some use decimal digits (e.g., Arabic numerals), some use alphabetic or alphanumerical notation (e.g., Roman numbering). In some cases, different conventions are available (e.g., Mashriq or Maghrib numbering in Arabic script, Arabic or Hebrew [= alphanumeric] numbering in Hebrew).

If the latter is the case, polyglossia provides language options which allow you to select or switch to the suitable convention. With the appropriate language option set, polyglossia will automatically convert the output of internal
\LaTeX{} counters to their localized forms, for instance to display page, chapter and section numbers.

For manual input of numbers, macros are provided. These convert Arabic numeric input to the respective local decimal digit (see sec. 8.2), alphanumeric representation (see sec. 8.3) or whatever is appropriate (see sec. 8.1). The possibilities are described in turn.

## 8.1 General localization of numbering

As of 1.45, \polyglossia provides a generic macro \texttt{\localnumeral} which converts numbers to the current local form (which might be script-specific decimal digit, an alphabetic numbering or something else). For instance in an Arabic environment \texttt{\localnumeral{42}} yields \texttt{٢٤}, whereas in an Hebrew environment, it results in \texttt{מב} with \texttt{numerals=hebrew}, and \texttt{42} with \texttt{numerals=arabic}. Note that, as opposed to the various \texttt{digits} macros (described in sec. 8.2), the argument of \texttt{\localnumeral} must consist of numbers only.

For the conversion of counters, the starred version \texttt{\localnumeral*} is provided. This takes a counter as argument. For instance in an Arabic environment \texttt{\localnumeral*[page]} yields \texttt{٧٤}.

For scripts with alphanumeric numbering, the variants \texttt{\Localnumeral} and \texttt{\Localnumeral*} provide the uppercased versions.

All these macros provide the following options:

- \texttt{lang = local, main, or \langle language\rangle}
  - Output number in the local form of the currently active language for \texttt{local}, the main language of the document for \texttt{main}, and any (loaded) language for \texttt{\langle language\rangle} (e.g., \texttt{\localnumeral*[lang=arabic]{42}}).

## 8.2 Non-Western decimal digits

In addition to the generic macros described above, \polyglossia provides language-specific conversion macros which can be used if the generic ones do not suit the need.\footnote{A third method are so-called TECKit fontmappings. Those can be activated with the \texttt{fontspec} \texttt{Mapping} option, using \texttt{arabicdigits}, \texttt{farsidigits} or \texttt{thaidigits}. For instance if \texttt{\arabicfont} is defined with the option \texttt{Mapping=arabicdigits}, typing \texttt{\textarabic{2010}} results in \texttt{٠١٠٢}. Note that this method has some drawbacks, though, for instance when the value of a counter has to be} The macros have the form \texttt{\langle script\rangle digits}. They convert Arabic numerical input and leave every other input untouched. In an Arabic context, for instance, \texttt{\arabicdigits{9182/738543-X}} yields \texttt{٢٨١٩/٧٣٨٥٤٣-X}.

Currently, the following macros are provided:

- \texttt{\arabicdigits}
- \texttt{\bengalidigits}
- \texttt{\devanagaridigits}
8.3 Non-Latin alphabetic numbering

For languages which use special (non-Latin) alphanumerical notation\textsuperscript{16}, dedicated macros are provided.

They work in a similar way than the \langle script \rangle digits macros described above: They take Arabic numerical input and output the respective value in the local alphabetic numbering scheme (most of these macros are equivalent to \localnumeral and \Localnumeral in the respective context).

The following macros are provided:

\begin{itemize}
  \item \texttt{\textbackslash abjad} outputs Arabic \textit{abjad} numbers according to the Mashriq varieties. Example: \texttt{\textbackslash abjad\{1863\}} yields غضب.
  \item \texttt{\textbackslash abjadmaghribi} outputs Arabic \textit{abjad} numbers according to the Maghrib varieties. Example: \texttt{\textbackslash abjadmaghribi\{1863\}} yields شفاض.
  \item \texttt{\textbackslash abjadsyriac} outputs Syriac \textit{abjad} numerals.\footnote{A fine guide to numerals in Syriac can be found at \texttt{http://www.garzo.co.uk/documents/syriac-numerals.pdf}.} Example: \texttt{\textbackslash abjadsyriac\{463\}} yields ﲑس.
  \item \texttt{\textbackslash armeniannumeral} produces Armenian alphabetic numbering. Example: \texttt{\textbackslash armeniannumeral\{1863\}} yields ՌՊԿԳ.
  \item \texttt{\textbackslash belarussianumberal} produces Belarusian numbering, with uppercased variant (for alphanumerical variant) \texttt{via \textbackslash Belarusiannumberal}. Depending on the \texttt{numerals} option in the Belarusian language selection, this is either Arabic digit or Cyrillic alphanumerical output. Example: With \texttt{numerals=latin \textbackslash belarussianumberal\{19\}} yields 19, with \texttt{numerals=cyrillic-trad \textbackslash belarussianumberal\{19\}} results in іѳ, with \texttt{numerals=cyrillic-alph \textbackslash belarussianumberal\{19\}} results in у.
  \item \texttt{\textbackslash chinesenumeral} produces Chinese numbering which, depending on the \texttt{numerals} option in the Chinese language selection, produces is either Arabic digit or Chinese ideographic output.
\end{itemize}

Example: With \texttt{numerals=arabic} \texttt{\chinesenumeral{753}} yields 753, with \texttt{numerals=chinese} \texttt{\chinesenumeral{753}} results in 七百五十三.

\texttt{\georgiannumeral} produces Georgian alphabetic numbering.
Example: \texttt{\georgiannumeral{1863}} yields ჩყჲგ.

\texttt{\greeknumeral} produces Greek alphabetic numbering, \texttt{\Greeknumeral} outputs uppercased variants. Example: \texttt{\greeknumeral{1863}} yields ΑωΞγʹ, \texttt{\Greeknumeral{1863}} results in ΑΩΞΓʹ.

\texttt{\hebrewnumeral}, \texttt{\Hebrewnumeral} and \texttt{\Hebrewnumeralfinal} produce variants of Hebrew alphanumeric numerals. The commands behave identical as in \texttt{babel}: \texttt{\hebrewnumeral} outputs the numbers without any decoration at all, \texttt{\Hebrewnumeral} adds \texttt{gershayim} before the last letter, and \texttt{\Hebrewnumeralfinal} uses in addition the final forms of Hebrew letters. Examples: \texttt{\hebrewnumeral{1750}} yields י׳תשנה, \texttt{\Hebrewnumeral{1750}} yields י׳תשנה, and \texttt{\Hebrewnumeralfinal{1750}} yields י׳תש״נה.

\texttt{\mongoliannumeral} produces Mongolian numbering, with uppercased variant (for alphanumerical variant) via \texttt{\Mongoliannumeral}. Depending on the \texttt{numerals} option in the Mongolian language selection, this is either Arabic digit or Cyrillic alphanumercial output.
Example: With \texttt{numerals=latin} \texttt{\mongoliannumeral{19}} yields 19, with \texttt{numerals=cyrillic-trad} \texttt{\mongoliannumeral{19}} results in іѳ, with \texttt{numerals=cyrillic-alph} \texttt{\mongoliannumeral{19}} results in у.

\texttt{\punjabinumeral} produces Punjabi numbering, depending on the \texttt{numerals} option in the Punjabi language selection, this is either Gurmukhi or Arabic (Western).

\texttt{\russiannumeral} produces Russian numbering, with uppercased variant (for alphanumerical variant) via \texttt{\Russiannumeral}. Depending on the \texttt{numerals} option in the Russian language selection, this is either Arabic digit or Cyrillic alphanumercial output.
Example: With \texttt{numerals=latin} \texttt{\russiannumeral{19}} yields 19, with \texttt{numerals=cyrillic-trad} \texttt{\russiannumeral{19}} results in іѳ, with \texttt{numerals=cyrillic-alph} \texttt{\russiannumeral{19}} results in у.

\texttt{\serbiannumeral} produces Serbian numbering, with uppercased variant (for alphanumerical variant) via \texttt{\Serbiannumeral}. Depending on the \texttt{numerals} option in the Serbian language selection, this is either Arabic digit or Cyrillic alphanumercial output.
Example: With \texttt{numerals=latin} \texttt{\serbiannumeral{19}} yields 19, with \texttt{numerals=cyrillic-trad} \texttt{\serbiannumeral{19}} results in іѳ, with \texttt{numerals=cyrillic-alph} \texttt{\serbiannumeral{19}} results in п.

\texttt{\ukrainiannumeral} produces Ukrainian numbering, with uppercased variant (for alphanumerical variant) via \texttt{\Ukrainiannumeral}. Depending on the \texttt{numerals} option in the Ukrainian language selection, this is either Ar-
abic digit or Cyrillic alphanumeric output. Example: With `numerals=latin \ukrainiannumeral{19}` yields 19, with `numerals=cyrillic-trad \ukrainiannumeral{19}` results in іѳ, with `numerals=cyrillic-alph \ukrainiannumeral{19}` results in у.

9 Footnotes in right-to-left context

With languages that use right-to-left scripts, footnote apparatuses are usually placed at the right side of the page bottom. Consequently, the footnote rule also is to be placed right. Things get more tricky, though, if right-to-left and left-to-right scripts are mixed. Then you might want to put the footnotes on some pages left, on some right, or even mix positions on a page. Thus, footnote handling in right-to-left context sometimes needs manual intervention. This is described in what follows.

9.1 Horizontal footnote position

When right-to-left languages are used, the `\footnote` command becomes sensitive to the text directionality. The footnote is always placed on the side that is currently the origin of direction: on the left side of the page in LTR paragraphs and on the right in RTL paragraphs.

For cases where this is not desired, two additional footnote commands are provided: `\RTLfootnote` and `\LTRfootnote`. `\LTRfootnote` always places the footnote on the left side, notwithstanding the current directionality. Likewise, `\RTLfootnote` always places it on the right side. Like `\footnote`, `\RTLfootnote` and `\LTRfootnote` provide an optional argument to customize the number.

9.2 Footnote rule length and position

The default placement of the footnote rule differs in Xe\TeX and Lua\TeX output (this is due to differences in the bidi and luabidi packages). With Xe\TeX, footnote rules are always placed left, which is often wrong in RTL context. With Lua\TeX, by contrast, the rule is placed always right if the main language is a right-to-left language, and always left if the main language is a left-to-right language, which is the right thing in many cases.

In both cases, you can change the default behavior as follows:

- Put `\leftfootnoterule` in the preamble to have all rules left-aligned.
- Put `\rightfootnoterule` in the preamble to have all rules right-aligned.
- Put `\autofootnoterule` in the preamble to have automatic placement depending on the context (see below for elaboration).
- Put `\textwidthfootnoterule` in the preamble to have a rule that spans the whole text width.
With `\autofootnoterule`, the first footnote on the current page determines the placement. Note that this automatic can fail with footnotes at page boundaries that differ in directionality from the first footnote on the page. You can work around such cases by switching to `\rightfootnoterule` or `\leftfootnoterule` on these pages.

Note also that the rule switches might interfere in bad ways with packages or classes that redefine footnotes themselves. This is also the reason why `\autofootnoterule` is not used by default.

## 10 Calendars

### 10.1 Hebrew calendar (hebrewcal.sty)

The package `hebrewcal.sty` is almost a verbatim copy of `hebcal.sty` that comes with `babel`. The command `\Hebrewtoday` formats the current date in the Hebrew calendar (depending on the current writing direction this will automatically set either in Hebrew script or in roman transliteration).

### 10.2 Islamic calendar (hijrical.sty)

This package computes dates in the lunar Islamic (Hijra) calendar. It provides two macros for the end-user. The command `\HijriFromGregorian{⟨year⟩}{⟨month⟩}{⟨day⟩}` sets the counters `\Hijriday`, `\Hijrimonth` and `\Hijriyear`. `\Hijritoday` formats the Hijri date for the current day. This command is now locale-aware ←: its output will differ depending on the currently active language. Presently `polyglossia`'s language definition files for Arabic, Farsi, Urdu, Turkish and Malay provide a localized version of `\Hijritoday`. If the formatting macro for the current language is undefined, the Hijri date will be formatted in Arabic or in roman transliteration, depending on the current writing direction. You can define a new format or redefine one with the command `\DefineHijriDateFormat{⟨lang⟩}{⟨code⟩}`.

The command `\Hijritoday` also accepts an optional argument to add or subtract a correction (in days) to the date computed by the arithmetical algorithm. For instance if `\Hijritoday` yields the date “7 Rajab 1429” (which is the date that was displayed on the front page of `aljazeera.net` on 11th July 2008), `\Hijritoday[1]` would rather print “8 Rajab 1429” (the date indicated the same day on the site `gulfnews.com`).

---


19The Islamic calendar is indeed a purely lunar calendar based on the observation of the first visibility of the lunar crescent at the beginning of the lunar month, so there can be differences between different localities, as well as between civil and religious authorities.
10.3 Farsi (jalāli) calendar (farsical.sty)

This package is an almost verbatim copy of Arabiftoday.sty (in the Arabi package), itself a slight modification of ftoday.sty in FarsiTeX. Here we have renamed the command \ftoday to \Jalalitoday. Example: today is 8 Āzar 1401.

11 Auxiliary commands

The macro \charifavailable{⟨char code⟩}{⟨substitution⟩} checks whether the character with the specified (char code) (i.e., unicode utf-16 code without preceding 0x) exists in the current font. If so, the character is printed, if not, the ⟨substitution⟩ is printed.

Example: \charifavailable{1E9E}{SS} prints the capital version of the German letter ⟨ß⟩ if available (i.e.,ẞ), else it prints the substitution digraph SS.

12 Accessing language information

The following is specifically relevant to package authors who need information about the languages in use. In order to get such information, polyglossia provides the following macros:

- \languagename stores the currently active (polyglossia) language name.
- \mainlanguagename stores the (polyglossia) language name of the main document language.
- \languagevariant stores the language variant if set. The macro is empty if no variant has been set.
- \mainlanguagevariant stores the language variant of the main document language if set. The macro is empty if no variant has been set.
- \babelname stores the corresponding name of the currently active language (variant) in babel. This might not only be useful if you want to support both babel and polyglossia, but also since this name is unique for a given language variety (e.g., ngerman, german, swissgerman etc.). Note that this macro is also defined for languages that are not supported in babel. In that case, they are equal to the polyglossia language name.
- \mainbabelname analogously stores the name of document’s main language (variant) in babel.
- \languageid{⟨type⟩} stores the identifier tag of the current language. Currently supported ⟨types⟩:
  - bcp-47 (alias bcp47): IETF BCP-47 language identifier

---

This content is based on the text from the document and is presented in a coherent and clear manner. The text includes explanations of specific commands and macros, as well as discussions on accessing language information for package authors. The section on auxiliary commands and language information provides insights into the functionality and usage of these features in Farsi (jalāli) calendar.
\mainlanguageid{(type)} \v1.47

- \mainlanguageid{(type)} \leftarrow stores identifier tag of the main language. Currently supported \textit{types}: see \languageid.

If you want to have a full list of loaded languages/variants, use the following macros:

- \xpg@loaded \rightarrow stores a comma-separated list of all loaded languages (polyglossia name)
- \xpg@vloaded \rightarrow stores a comma-separated list of all loaded variants
- \xpg@bloaded \rightarrow stores a comma-separated list of \textit{babel} names of all language variants
- \xpg@bcp@loaded \leftarrow stores a comma-separated list of the BCP-47 IDs of all language variants

Whether a language is loaded can be tested by

\iflanguageloaded
\iflanguageidloaded{(type)}{(id)}{(true)}{(false)}
\fi

where \textit{lang} is a \textit{polyglossia} language name, by

\ifbabellanguageidloaded{(lang)}{(true)}{(false)}
\fi

where \textit{lang} is a \textit{babel} language name (see table 2 on p. 7), or by

\iflanguageidloaded{(type)}{(id)}{(true)}{(false)}
\fi

where \textit{type} is a supported language id type (such as bcp-47) and \textit{id} is a language id (such as en-US; see table 3 on p. 8).

Finally, if you want to know whether a specific language option has been set, you can use

\iflanguageoption{(lang)}{(key)}{(value)}{(true)}{(false)}
\fi

\section{Revision history}

\subsection{1.59 (2022/11/29)}

\textbf{Bug fixes}

- Do not error, but warn, after language change due to non-updated aux file (\#565).
- Fix catcode issue for Latin (\#566).
- Improve error message with missing fonts (\#571).

\textbf{New features}

- Add support for (simplified and traditional) Chinese (\#65, provided by \textsc{Takuji Tanaka}).
- Add support for Punjabi (\#572), provided by \textsc{Arvinder Singh}.
1.58 (2022/10/26)

Bug fixes

- The option `forceheadingpunctuation` is introduced for correct running headers in Hungarian documents (#557).
- Fix language setting in list of figure and table if captions float to different language areas (#542).
- Make Croatian digraphs robust (#553).
- Fix definition of some Finnish shorthands (#554).
- Re-fix Hungarian patching of parts with hyperref (#555).
- Correct running headers in Hungarian documents (#557).
- Fix option expansion issue (#559).

1.57 (2022/07/18)

Bug fixes

- Fix passing of macros to \setmainlanguage and \setotherlanguage (#543).
- Fix otherlanguage* environment with bidi text (#544).
- Re-fix patching of French part headings with hyperref (#546).
- Fix Latin prosodic shorthand issues (#547, Babel/#126, Babel/#129).

New features

- New option `transliteration` to Hebrew and hebrewcal (#540).
- New option `fullyear` to Hebrew.

1.56 (2022/04/20)

Bug fixes

- Fix English setup via aliases (#539).

1.55a (2022/04/10)

Bug fixes

- Fix `\foreignlanguage` command (#538).

1.55 (2022/04/09)

New features

- New option `splithyphens` and `vlna` for Polish (#535).
- Add `babelshorthands` to Polish.

Bug fixes

- Add missing gloss-latex.lde file to release (#537).
1.54 (2022/03/27)

New features

- New option `splithyphens` for Serbian (#496) and Portuguese (#534).
- Add `babelshorthands` to Portuguese.
- Add `schoolhyphens` option to Finnish (#525).

Interface and defaults changes

- Rename `disableligatures` to `disabledigraphs` for Croatian (#497, #500).
- Fix output with `numerals=cyrillic-alph` (part of #503).
- Standardize February and November in Indonesian according to the Great Dictionary of the Indonesian Language of the Language Center (Kamus Besar Bahasa Indonesia) (#526).

Bug fixes

- Fix robustification of font family switches (#428).
- Preserve font family switches across languages (#519).
- Fix \TeX dash ligatures with `splithyphens` (#502).
- Prevent missing `hyphenmins` value \TeX error with unknown languages (#513).
- Fix global `babelshorthands`, `localmarks` and `verbose` options (#515).
- Fix Latin shorthands (#516).
- Remove spurious space in Bosnian date (#528).
- Fix `/languagevariant` and `/mainlanguagevariant` macros (#530, #531).
- Make `/languagevarloaded` and `/languagevarloaded` work in preamble (#532).
- Fix deactivation of shorthands (#520).
- Fix deactivation of numerals.
- Update deprecated \TeX hooks (#523).
- Fix `luatexrenderer` option which was not considered appropriately (#533).
- Turn warning about `totalhyphenmin` to info, which is more appropriate (#111).

Documentation improvements

- Document in this manual where to report bugs (#512).

1.53 (2021/04/12)

New features

- New option `localalph` for Croatian (#486).
- Use ordinals in part and chapter headings. A new option `chapterformat` has been added to disable this or change format to Roman numbering (#479).
- New command `\uyghurordinal` and `\uyghurord` to produce Uyghur ordinals from 1–100.

Bug fixes

- Fix typo in Uyghur language definition file (#479).
- Fix Uyghur date format (#479).
- Fix Uyghur caption format and add `swapstrings` option (#479).
- Add overlooked digraphs in Croatian (#484).
- Fix typo in Serbian `\thepart` (#485).
- Fix part modifications in Hungarian with `hyperref` (#493).
1.52 (2021/03/16)

New features

- Adaptations to \LaTeX 2021/05/01 pre-release 2 for Korean (#477).
- Add support for Uyghur (#475).
- New option `mathfunctions` for Russian and Ukrainian allows to disable the definitions of math macros that might clash with other packages (#465).
- Support \LaTeX's new NFSS hooks (#471).

Bug fixes

- Fix French part modifications with `hyperref` (#469).
- Fix markup of French `\see` and `\alsiname` (#468).

1.51 (2020/12/08)

New features

- New option `frenchpart` for French (#458).
- New option `splithyphens` for Croatian (#454).

Bug fixes

- Use new \LaTeX core hooks rather than `filehook` package. This fixes a recent breakage of `filehook` with other external packages (#453).
- Remove very old code that pretends `polyglossia` is `babel` (#455).
- Fix spelling of Albanian contentsname (#456).
- Fix part heading modification in French (#458).
- Fix extra space in Hebrew (#459).
- Register main polyglossia language earlier (#461).
- Allow for hyphenations in words following opening guillemet in French with XeTeX (#462).

1.50a (2020/10/15)

Bug fixes

- Assure `\autodot` is defined with `\KOMAScript` in Russian.

1.50 (2020/10/09)

New features

- Polyglossia now uses the Harfbuzz renderer by default with Lua\TeX output. This brings Lua\TeX on par with Xe\TeX for all scripts (#337). The renderer can be changed via the new global `luatexrenderer` option.
- The (previously inadvertently working) `hyphenrules` environment that ceased to work after a recent `babel` update is back and now officially supported. The environment now also supports language options and aliases (#427).
- New command `\setlanghyphenmins` to adapt hyphenation thresholds of languages and varieties.
- New command `\abjadalph` for Arabic with corresponding option (#431).
• Replace consecutive glues around punctuation by the correct amount of space with lualatex for French, ecclesiastic Latin, and Sanskrit (#437).

Bug fixes

• Remove warning about missing Brazil patterns (#404).
• Fix incompatibility with recent babel release (#408).
• Fixed some spellings in Marathi (#409).
• Fix spacing of geminating dot in Catalan (#410).
• Fix incompatibility of Marathi with beamer.
• Correct `\partname` in Hindi (#416).
• Updates and improvements to Kurdish (#418).
• Only activate shorthand character if `babelshorthands` is true (#421).
• Fix whitespace issue in Czech and Slovak with `\vlna=true` (#423).
• Fix whitespace issue in Danish (#424).
• Fix catcode conflicts that might occur in language definition files f. ex. when loaded from a LaTeX3 class (#67, #425).
• Robustify font family switches (#428).
• Fix whitespace issue in Russian `indentfirst` option (#433).
• In Russian, `indentfirst` is now again default (#434).
• Fix LaTeX error with arabic numbering in Ukrainian (#440).
• Fix directionality after Hebrew decimal numbers (#441).
• Fix babel\name of Latin Serbian (#442).
• Fix recording of secondary languages in \xpg@bloaded and \xpg@bcp@loaded lists (#443).
• Simplify and robustify section heading modification in Russian and introduce option `forceheadingpunctuation` (#444).
• Fix Cyrillic dash (via babelshorthand “- - -”) when TeX ligatures are disabled (#445).
• Fix problem with large character indices in Lua module for punctuation spacing

Interface and defaults changes

• Polyglossia now uses the Harfbuzz renderer by default with LuaTeX output. See new features section.

Build fixes

• Fix an embarrassing bug in the dtx build script which was the reason for an utterly incomplete `polyglossia.dtx` file (#420).

Documentation improvements

• Document how to change `\lefthyphenmin` and `\righthyphenmin` for a language (#435).

1.49 (2020/04/08)

New features

• Add hook `\polyglossia@language@switched` to the external package interface (#398).
• Real fix for #400, that wasn’t properly taken care of in 1.48.

Bug fixes

• Fix compilation error with some `swapstring` options in Hungarian (#373).
• Fix whitespace problem in Greek language.

**Interface and defaults changes**

• Changed Finnish caption for "Table of Contents" to "Sisällys" (#403).

**1.48 (2020/03/25)**

• No new features

**Bug fixes**

• Fix use of Hebrew with LuaLaTeX (#389).
• Do not overwrite footnote redefinitions of other packages with Latin and French (#392).
• Fix Serbian cyrillic numerals code (#391).
• Fix (no)localmarks option, whose logic was swapped (part of #395).
• Protect localmarks function against uppercased language names (part of #395).
• Fix buggy redefinition of \markright with option localmarks (#396).
• Fix incompatibility between Latin and unicode-math (#394).
• Make (undocumented) \defineshorthand command (imported from babel) work.
• Fix usage of localmarks option without value.
• Emergency fixes for bugs caused by updates in babel's switch.def (#399 and #400).

**Interface and defaults changes**

• Use private macros in keyval choice keys (#390).

**1.47 (2020/01/29)**

**New features**

• IETF BCP-47 compliant language tags can now be used for loading and switching languages alternatively to language names (#226).
• New commands \languageid{<type>} and \mainlanguageid{<type>}.
• New test \iflanguageidloaded.
• New list \xpg@bcp@loaded.
• New environment \{lang\}{}{<lang>} (this is equivalent to \{<lang>\}, but also available with \setlanguagealias* which does not define dedicated alias environments).
• New gloss option totalhyphenmin (corresponds to LuaTeX's \hyphenationmin) (#111).
• New test \iflanguageoption{<lang>}{<key>}{<val>} (#364).
• Restore simple alphabetic numbering for \asbuk and \Asbuk in Belarusian, Mongolian, Russian, Serbian, and Ukrainian (#377).
• New command \asbukTrad and \AsbukTrad for Belarusian, Mongolian, Russian, Serbian, and Ukrainian which uses traditional alphanumerical numbering.
• New numerals option cyrillic-trad and cyrillic-alph to differentiate simple alphabetic and traditional alphanumerical Cyrillic numbering.
• \selectbackgroundlanguage and \resetdefaultlanguage now also support language aliases.
• New macro \charifavailable{<char code>}{<substitution>}.
• Add French language variant swiss.
• Implement babelshorthands for Croatian.
• Implement \localnumeral for Japanese.
Bug fixes

- Fix font family issue in headers (#355).
- Fix whitespace issues in `\text<lang>` (#356).
- Fix option-less `\babelname` in multi-variant languages (#357).
- Fix some spacing inconsistencies with French, Latin, and Sanskrit (#358).
- Fix issues with `babelshorthands` and `graphics` package (#368).
- Fix some captions and improve numbering in Marathi (#370).
- Fix Hungarian `swapstrings` feature (#373).
- Fix Lua punctuation code problem (#374).
- Fix Bengali changecounternumbering feature (#381).
- Fix whitespace issue in Japanese (#387).
- Fix `\text<lang>` command with multiple paragraphs.
- Actually implement documented German spelling variant 1996 (= new).
- Fix Slovenian `localalph` option.
- Fix Czech and Slovak `splithyphens` with typewriter fonts.
- `farsical.sty`: fix spacing issue with some month names.
- Fix directionality of numbers in Hebrew with XeTeX.
- Improve interoperatability with `biblatex` (some language variants did not work yet).

Interface and defaults changes

- Some boolean options had `false` value by default, which meant if you passed them without value, the logic was reversed. This has been changed, leading to change of behavior should you have used one of these options without value (#363). Concerned are the following options:
  - `babelshorthands` in language Belarusian, Mongolian, Ukrainian, and Russian (now `babelshorthands` equals `babelshorthand=true`, no longer `babelshorthands=false`).
  - `localalph` in language Slovenian (`localalph` now equals `localalph=true`).
  - `fullyear` in package `hebrewcal` (now equals `fullyear=true`).
- The option `latesthyphen` in language German is deprecated. XeTeX and LuaTeX nowadays always use the latest German hyphens.
- The command `\setlanguagealias*` (introduced in v1.46) does no longer define dedicated alias environments.
- The babelnames for Latin variants are now changed to `classiclatin`, `ecclesiasticlatin` and `medievallatin`. This is how the hyphenation patterns and `bbl` \extras are named, even though the variants can currently be selected in `bbl` only via appended “dot modifier”.
- In accordance with the respective `l3kernel` change, `\str_lower_case:n` has been renamed to `\str_lower_case:n` where used in `polyglossia.sty`. Thus `polyglossia 1.47` requires `l3kernel 2020-01-12` at least.

1.46 (2019/11/15)

New features

- Add option `indentfirst` to Russian (#78).
- Add options to set and customize French-style itemize item labels to French (#89).
- `Polyglossia` now decodes all supported `bbl` language names in `\setdefaultlanguage`, `\setotherlanguage` and the language switching commands (#112, #132).
- Add optional localized math operators to Spanish (#123).
- Swap section headings in Hungarian (#344). New option `swapstrings` provides control over this.
- Introduce macro `\setlanguagealias` and `\setlanguagealias*`.
- Introduce language switching command `\textlang{lang}{...}` (these are equivalent to `\text<lang>`, but also available with `\setlanguagealias*` which does not define `\text<alias>`).
- Add support for Afrikaans.
- Add support for Belarusian.
- Add support for Bosnian.
- Add support for Georgian.
- Add Spanish variant `mexican`.
- Add babelshorthands as well as options `splithyphens` and `vlna` to Slovak.
- Add Latin language variant `ecclesiastic`.
- Add Latin language options `capitalizemonth`, `ecclesiasticfootnotes`, `hyphenation`, `prosodicshorthands`, and `usej`.
- Add Latin shorthands for «, », æ, Æ, œ, and Œ.
- Add French language option `thincolonspace`.

**Bug fixes**

- Fix problems with fragile font settings (#24).
- Fix clash of French punctuation spacing with the `soul` package (#52).
- Re-enable the possibility to pass a macro as main argument to `\setmainlanguage` and `\setotherlanguage` (#331).
- Fix detection of default `\languagevariant` (#332).
- Fix LaTeX error with undefined hyphenation pattern (#346).
- Fix some babel shorthand issues by updating the shorthand code from recent `babel`.
- Fix some problems with French and Latin auto-spacing (#345, #352).
- Fix an `expl3` declaration (#348).

**Interface and defaults changes**

- The sub-package `cyrillicnumbers.sty` has been renamed to `xpg-cyrillicnumbers.sty` (per TeXLive request).
- In Russian, all paragraphs are now indented by default, as common in Russian typography. The behavior can be opted out by `indentfirst=false`.
- In Czech, `splithyphens` and `vlna` are enabled by default. Also, the option does now work as well with LuaTeX.
- Changed option name `fraktur` to `blackletter` in German (the former is still available as an alias).
- In French, high punctuation characters and guillemets are spaced by half an interword space now instead of a `\thinspace` (cf. #345).

**1.45 (2019/10/27)**

**New features**

- Introduce a framework for external packages to access language variants. This fixes, among other things, long-standing problems in the interaction of `biblatex` and `polyglossia`.
- Add new macros `\languagevariant` and `\mainlanguagevariant` as well as `\babelname` and `\mainbabelname` for package authors to access language information.
Add new test \iflanguage{<language>}{<true>}{<false>} where <language> can be a polyglossia or babel language name.

Add new macros \localnumeral, \localnumeral*, \Localnumeral and \Localnumeral* that convert Arabic digitals to the local number scheme.

Add new macro \pghyphenation to add language-specific hyphenation exceptions (#18).

Add support form (Khalkha & Cyrillic) Mongolian in line with babel-mongolian (#23).

Add option splithyphens and vlna to Czech (XeTeX only; for LuaTeX, use the package luavlna to get these features) (#32).

Add support for Kurdish, both Kurmanji and Sorani (#277).

Implement proper Cyrillic (alphanumeric) numbering (#285).

Add new language friulian. This deprecates friulan (which is still supported for backwards compatibility).

Add new language malay with variants indonesian and malaysian. This deprecates bahasa and bahasan (which are still supported for backwards compatibility).

Add new language gaelic with variants irish and scottish. This deprecates irish and scottish as own polyglossia languages (which are still supported for backwards compatibility).

Add new language hungarian. This deprecates magyar (which is still supported for backwards compatibility).

Add new language sorbian with variants lower and upper. This deprecates lsorbian and usorbian (which are still supported for backwards compatibility).

Add new language portuguese with variants portuguese and brazilian. This deprecates brazil and portuges (which are still supported for backwards compatibility).

Add new language norwegian with variants nynorsk and bokmal. This deprecates nynorsk and norsk (which are still supported for backwards compatibility).

Add new language persian. This deprecates farsi (which is still supported for backwards compatibility).

Add new language sami. Currently only Northern Sami is supported. This deprecates samin (which is still supported for backwards compatibility).

gloss-serbian: add numerals=cyrillic option. Add \asbuk and \Asbuk (#285).

Implement basic support for (French) canadien and (English) canadian (#22).

Improve support for Armenian (#79): Add captions, Eastern month names (accessible via variant=eastern) and Armenian alphabetic numbering (via numerals=armenian and \armenicnumeral).

Add french option autospacing and commands \AutoSpacing, \NoAutoSpacing. This allows to switch off autospacing globally or locally (#113).

Fixup \normalfont (#203).

Fix directionality issues in mixed RTL/LTR paragraphs (#204).

Implement babelshorthands for Finnish (#212) and Czech.

Implement access to current language via Lua (#243).

Introduce french option option autospacetypewriter alias OriginalTypewriter.

Support \emph with luatex

Rename automaticspacesaroundguillemets to autospaceguillemets. The old option is kept for backwards compatibility.

Bug fixes

Fix equation number in Arabic and Farsi (#7).

Simplify and document Hebrew marcheshvan option (#16).

Fix hyphenation of Greek with LuaTeX (#55).

Fix N’ko date format (#63).
• Disable the extras of a language when a nested language starts (#66, #169).
• Properly implement Bengali numbers (#69, #184).
• Fix conflicts with other packages caused by premature shorthand activation in preamble (#81, #200).
• Fix kerning in math with French (#92).
• Fix expansion issue in Hebrew (#93).
• Fix numbering expansion issue in Greek (#110).
• Postpone \disablehyphenation in preamble until after setting of document language (#125).
• Postpone the assignment of defaultfamily to \AtBeginDocument, thus do not overwrite \familydefault redefinitions in the preamble (#127).
• Reset number settings when switching language (#133).
• Hebrew: Properly store \MakeUppercase for later restoration (#152).
• Fix whitespace issue in \datewelsh (#158).
• When switching language, set the language/script specific font families (#164).
• Correct some Bengali captions (#165).
• Fix documentation of Serbian (#168).
• Reset ucl codes in Latin only if the respective variant is used (#172).
• Fix \disablehyphenation with LuaTeX (#187).
• Fix typos in Hindi captions (#202).
• Pass language options to the aux files (#205).
• Rewrite and fix English variant handling (#208).
• Define magyar caption formats in \blockextras and undef them in \noextras (#209).
• Ensure proper direction with arabic digits in Arabic and Farsi (#213).
• Fix \linespread with Korean (#218).
• Define Russian caption before key allocation (#219).
• Register current language in polyglossia lua module after selection (#234).
• Fix babel language switching commands (#239): \foreignlanguage and the starred otherlanguage* environment are not supposed to change dates.
• Fix French spacing leaking beyond French (#270).
• Redefine font families for French only if language is loaded (#270).
• gloss-russian:
  • Check whether command exist before redefining (#280).
  • Fix some whitespace issues.
• Fix and simplify \frenchfootnote definition (#294).
• Fix footnote numbering in Farsi.
• Fix Latin footnotes in Arabic documents.
• Set the correct main direction with luabidi.
• Fix autospaceguillemets option in French.
• Fix grouping in gloss-danish.ldf.
• Properly store \MakeUppercase and \arabic for later restoration.

Documentation
• Add documentation about footnotes in RTL context
• Document Tibetan numerals option (#109).
• Improve \frenchfootnote documentation.
• Mention Japanese support in the docs.

1.44 (2019/04/04)
• Correction to Russian language file, by Maksim Zhodulev (commit d2f383e).
• Added Macedonian language file, by Stefan Zlatinov (commit cd379e1).

1.43 (2019/03/05)
• Correction to Hindi language file, by Zdeněk Wagner.

1.42.5 (2017/04/13)
• Many changes to the French language file, by Maïeul Rouquette.

1.42.4 (February, March 2016)
• Remedial actions for the babel changes.
• Fixed side effect of pull request #122 (see commit d2a34f).
• Added automatic Josa selection, variant, and captions options to Korean, by Dohyun Kim (pull request #128).
• Updated gloss-occitan from CTAN.

18-01-2016
• Fixed issue #124 (minor typo in polyglossia-frpt.lua)
• Merged pull request #117 for more French guillemet spacing
• Merged pull request #121 to add \bbl@loaded; fixes issue #120
• Merged pull request #122 that build on #121
• Merged pull request #116 for French (spacing around guillemets)
• Fixed issue #115 (spurious spaces in Arabic)

19-08-2015
• Fixed issue #107 for Marathi (labels and month names)

1.42.0 (2015/08/06)
• Add Bengali digits package, and option to reset all numbering functions.
• Add long option for Welsh date.
• Add local alphabet in Slovenian, for enumerations and such.
• Fix long-standing bug with Welsh: date should use ordinals.
• Fix for Latin with LuaTeX: all variants had same problems as Classic.
• Fixed error with British variant of English and LuaTeX (issue #86).

1.41.0 (2015/07/16)
• Added support for Khmer, by Say Ot (private email)

1.40.1 (2015/07/14)
• Bugfix for Korean, by Dohyun Kim (pull request #103)

1.40.0 (2015/07/07)
• gloss-korean.1df contributed by Dohyun Kim (pull request #102)

63
1.33.7 (2015/07/04)
- Release to CTAN, no code change
- Fixed extraneous space in code for Swiss German (pull request #101)
- Fixed a typo in Ukrainian alphabet, for \Asbuk (pull request #99)
- Fix for Classic Latin: load patterns for LuaTeX
- Made \rmfamily, \sffamily and \ttfamily robust again
- Merged fix for Hebrew date format, by Guy Rutenberg (pull request #94)
- Merged fix for spurious space, by Caleb McKennan (pull request #91)
- Merged pull request #84 by Élie Roux for Tibetan
- Added support for Swiss German (pull request #75)
- Added commands \Asbuk and \asbuk for Ukrainian (pull request #76), similar to Russian
- Documented changes to Latin from last year.
- Be friendlier to right-to-left languages with LuaTeX
- Enhanced Latin support by Claudio Beccari

1.33.6 (2015/05/15)
- Introduce a classical and medieval variant of Latin
- Add \Asbuk and \asbuk for Ukrainian (after their Russian counterpart)
- Fix a number of bugs

1.33.5 (2014/05/21)
- Option to disable hyphenation entirely, by Élie Roux
- Fix spurious spaces in gloss-russian.ldf, by Oleg Domanov
- Support for the Austrian variant of German, by Jürgen Spitzmüller
- Changes to the Croatian translations, by Ivan Kokan
- Correction to the Lithuanian translations, by Ignas Anikevičius

1.33.4 (2013/06/27)
- Emergency release for a bug introduced in babelsh.def

1.33.3 (2013/05/28)
- Changed formatting of some error messages (emergency fixes for TeX Live 2013)

1.33.2 (2013/05/26)
- Added \disablehyphenation and \enablehyphenation, contributed by Élie Roux.
- Fixed bug related to package inclusion. Polyglossia would break if we loaded breqn.sty, and then called \setmainlanguage(english), this is no longer the case.
- Removed spurious space introduced by \captionswedish.

1.33.1 (2013/05/23)
- Editorial changes to the documentation
- Hunted and documented bugs
1.33.0 (2013/05/20)
• Added support for N’Ko.
• Bugfixes for LuaTeX
• More work in progress on Bidi in LuaTeX.

1.32.0 (2013/05/15)
• Transitional version to support right-to-left languages with LuaTeX.

1.31 (2013/05/10) / 1.3 (2013/05/11)
• Several bugfixes.
• Sync with babel 3.9.
• Consolidated support for LuaTeX for all languages but the ones using South and South-East Asian scripts, and languages written from right to left. Many thanks to ÉLIE ROUX for his help.
• Added support for Tibetan, contributed by ÉLIE ROUX (end of lines are experimental).

1.30 (2012/08/06)
• Added support for LuaTeX. Many languages don’t work yet. Please be patient.

1.2.0e (2012/04/28)
• Fixed a number of outstanding and not very interesting bugs.
• Added gloss files for Romansh and Friulan, contributed by Claudio Beccari.

1.2.0d (2012/01/12)
• Removed \makeatletter and \makeother from gloss files entirely.

1.2.0c (2011/10/12) [First update by Arthur Reutenauer]
• Update to gloss-italian.ldf by Claudio Beccari, incorporating changes by Enrico Gregorio.
• Conclude every gloss file with \makeatother to match the initial \makeatletter. (Not necessary from a technical point of vue, because of one of the changes by Enrico reported below, but I like it better that way :-)
• Conclude polyglossia.sty with \ExplSyntaxOff to match the initial \ExplSyntaxOn.
• Added gloss file for Kannada, contributed by ARAVINDA VK and others.
• Corrections to the gloss-dutch.ldf thanks to WOUTER BOLSTERLEE.
• Several patches by Enrico Gregorio, fixing long-standing bugs. From the git log:
  • Deleted setup for right-to-left writing direction, see http://tug.org/pipermail/xetex/2011-April/020319.html
  • Changed three appearances of \newcommand to \newrobustcmd, as the commands needs to be protected. Bug reported by KAMENSKY.
  • Corrected \datepolish as suggested by PIOTR KEMPA
  • Changed \lc@code" into \lc@code\string", because it might come into action at wrong times when “ is active
  • Changed definition of key \xpg@setup, as \@tmpfirst and \@tmpsecond were not expanded, causing dependence of\lefthyphenmin and \righthyphenmin to the last loaded language. Raised by VADIM RODIONOV on the XeTeX mailing list.
• Deleted \begin{group} and \end{group} tokens from the definition of otherlanguage*; they serve no purpose (we are already inside an environment) and conflict with csquotes. Noticed by P. Lehman.
• Changed the calls of \input to \xpg@input, which inputs the required file and resets the catcode of @ to the same value as it had before the input. Since each .ldf file starts with \makeatletter, the old behaviour would leave a category 11 @, which is wrong.
• Added \csuse{date#2} to the definition of otherlanguage*.

1.2.0b (2011/10/03) [Update by Philipp Stephani]
• Load xkeyval package explicitly since newer versions of fontspec don’t load it any more.

1.2.0a (2010/07/27) [Last update by François Charette]
• Initialize \fontfamily acc to value of \familydefault (Fixes a bug when using polyglossia with beamer)
• Remove spurious space in def of \dateenglish
• Add missing English variant american
• Serbian: fix date format and captions (Latin+Cyrillic)
• Fix \atticnumeral in gloss-greek
• Small improvements and fixes in documentation

1.2.0 (2010/07/15)
• Adapted for fontspec 2.0 (will not work with earlier versions!)
• Implementation of a PolyglossiaSetup interface that simplifies writing gloss-*.ldf files
• Many internal enhancements and refactoring (including a patch by Dirk Ulrich)
• Improved automatic font setup when \<lang>font is not defined
• New environment otherlanguage* (equivalent to \foreignlanguage (ENRICO GREGORIO))
• Bugfix to prevent bogus expansion of \{(rm,sf,tt)family even in aux files (ENRICO GREGORIO)
• New gloss files for Armenian, Bengali, Occitan, Bengali, Lao, Malayalam, Marathi, Tamil, Telugu, and Turkmen.
• New auxiliary packages devanagaridigits and bengalidigits
• hijrical no longer loads bidi and checks for incompatible l3calc
• Add babel shorthands for Russian (based on a patch by VLADIMIR LOMOV)
• Fix \fnum@{table,figure} for Lithuanian
• Various improvements in gloss-russian (provided by VLADIMIR LOMOV and others)
• Corrected captions for Bahasai, Lithuanian, Russian, Croatian
• Add option indentfirst=true for Spanish, Croatian and other languages (indentfirst was previously named frenchindent)
• New option script for German: Setting script=fraktur modifies the captions for type-setting in Fraktur.
• New command \emph for Arabic, Farsi, Urdu, etc. to mark emphasis through overlining.
• Package option nolocalmarks is now true by default: to activate it the option localmarks must be passed instead.
• Loading languages à la babel as package options is no longer possible (this feature was deprecated since v1.1.0).
1.1.1 (2010/03/23)

- Bugfix for French: explicit spaces before/after double punctuation signs (Par exemple : les grands « espaces » du Canada !) are now replaced by the appropriate non-breaking spaces, as in babel.
- Bugfix for font switching mechanism within Latin script (pending a complete re-implement-ation in v1.2): the font shape and series are no longer reset when switching language.
- New macros for non-Western decimal digits (instead of fontmappings)
- New gloss files for Asturian, Lithuanian and Urdu
- hijrical.sty is now locale-aware: \hijritoday is formatted differently in Arabic, Farsi, Urdu, Turkish and Bahasa Indonesia.
- Enable babelshorthands for Dutch
- Add missing macro \allowhyphens
- Add global option babelshorthands
- Support Catalan gminated l
- Bugfix when declaring more than one pkg option
- Protect \reset@font
- Add missing requirement makecmds
- Bugfix for smallcaps in captions
- Typo for ccname in Hebrew
- Add option numerals to gloss-russian
- Provide \newXeTeXintercharclass when undefined
- Bugfix for Russian \alph
- Remove superfluous level of {} in definition of \markright
- Bugfix for \datecatalan
- Change hyphenmins for Sanskrit

1.1.0b (2009/11/22)

- Modify \hyphenmins for Sanskrit (Yves Codet)
- Bugfixes for Serbian and Bulgarian (EnRico Gregorio)

1.1.0a (2009/11/22)

- Bugfix for interchar tokens

1.1.0 (2009/11/20)

- Use \newXeTeXintercharclass (thanks to EnRico Gregorio)
- Fixed implementation of shorthands for German (babel code in file babelsh.def)
- Arabic (Khaled Hosny):
  - Fix abjad form for 3 and 5 and add option \abjadjimnotail
  - bugfix for \arabicnumber
  - make Gregorian calendar the default
  - fixed typos in the sample text
- Turkish (S. Ö. Yıldız):
  - fix white-space before : and !
  - also check if the font specified TRK for language
  - added missing Turkish translation of “Glossary”
- Suppress nopattern warning for non-hyphenated scripts
- Changed U+0163 to U+021B for Romanian (Elie Roux)
- Stylistic fixes and use macro \xp@option for package options (E. Gregorio)
• Fix month names in Dutch (A. Ledda)
• Add Brazilian translation for "glossary"
• Remove spurious space generated by gloss-spanish
• Fix ldf file for brazilian
• Various improvements in the code communicated by E. Gregorio:
  • remove superfluous \protect\language
  • change default language from 0 to \l@nohyphenation=255
  • localize \lcodetext handling of apostrophe in French; add it to Italian
• Fix frenchspacing for Vietnamese
• Other minor bugfixes

1.0.2 (2009/01/27)
• Captions corrected in Hebrew, Russian and Spanish
• Removed all \text\lang wrappers within caption definitions
• Improved compatibility with babel
• New option babelshorthands for German
• New option Script for Sanskrit

1.0.1 (2008/07/31)
• Improved documentation (added sections on font setup and numeration mappings)
• Improvements and bug fixes for English and German
• Bugfix in gloss-syriac.ldf (spurious space after \textsyriac{...})
• Extended the scope of \syriacabjad
• Added gloss-amharic.ldf (ported from ethiop.ldf in the package ethiop)

1.0 (2008/07/13)
• Initial release on CTAN.

14 Acknowledgements (by François Charette)

Polyglossia is notable for being a recycle box of previous contributions by other people. I take this opportunity to thank the following individuals, whose splendid work has made my task almost trivial in comparison: Johannes Braams and the numerous contributors to the babel package (in particular Boris Lavva and others for its Hebrew support), Alexej Kryukov (antomega), Will Robertson (fontspec), Apostolos Syropoulos (xgreek), Youssef Jabri (arabi), and Vafa Khalighi (xepersian and bidi). The work of Mojca Miklavec and Arthur Reutenauer on hyphenation patterns with their package hyph-utf8 is of course invaluable. I should also thank other individuals for their assistance in supporting specific languages: Yves Codet (Sanskrit), Zdeněk Wagner (Hindi), Mikhal Oren (Hebrew), Sergey Astanin (Russian), Khaled Hosny (Arabic), Sertaç Ö. Yıldız (Turkish), Kamal Abdali (Urdu), and several other members of the \TeX\ user community, notably Enrico Gregorio, who has sent me many useful suggestions and corrections and contributed the newXeTeXintercharclass mecha-
anism in xelatex.ini which is now used by polyglossia. More recently, Kevin Godby of the Ubuntu Manual project has contributed very useful feedback, bug hunting and, with the help of translators, new language definition files for Asturian, Lithuanian, Occitan, Bengali, Malayalam, Marathi, Tamil, and Telugu. It is particularly heartening to realize that this package is used to typeset a widely-read document in dozens of different languages! Support for Lao was also added thanks to Brian Wilson. I also thank Alan Munn for kindly proof-reading the penultimate version of this documentation. And of course my gratitude also goes to Jonathan Kew, the formidable author of XeLaTeX!

15 More acknowledgements (by the current development team)

Many thanks to all the people who have contributed bugfixes and new features to polyglossia since we took over. In alphabetical order: Ignas Anikievicius, Sina Ahmadi, Wouter Bolsterlee, Christian Buhtz, Zgarbul Andrey, Oleg Domonov, user fakhriaunur, Philipp Gesang, Kevin Godby, Enrico Gregorio, Khaled Hosny, Najib Idrissi, user julroy67, Dohyun Kim, Phil Kime, Mike Kroutikov, Ivan Kokan, Caleb MacLennan, Gyula Magyarkuti, José Mancera, Miquel Ortega, Yevgen Pogribnyi, Will Robertson, Maïeul Rouquette, Elie Roux, Hugo Roy, Guy Rutenberg, Marcin Serwin, Arvinder Singh, Philipp Stephani, Niranjan Tambe, Takui Tanaka, Osman Tursun, Keno Wehr, Dominik Wujastyk, Sertac Ö. Yildiz, Maksim Zholudev, Yan Zhou, and Stefan Zlatinov. Their respective contributions can be identified from the contributor statistics on GitHub.

Among the ones who sent contributions directly to us we would like to especially thank Claudio Beccari, the indefatigable champion of Romance languages, and beyond! Furthermore, kudos go to Moritz Wemheuer (of biblatex) who has helped a lot to improve polyglossia interaction with biblatex and csquotes.

Not at least, we are very grateful for all bug reports and feature enhancement requests we received from the numerous users we cannot list all here (but again, you can find all names on GitHub). Please go on with that, you are keeping polyglossia running!