langcode.sty

Simple Language-Dependent Settings
Based on Language Codes*

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Abstract

langcode.sty in the first instance provides a command

\uselangcode{⟨chars⟩}

...to adjust language-dependent settings, such as key words, typographical conventions, and language codes (ISO-639-1). An author frequently writing documents in two or more languages can use the same commands independently of the language, provided they are gathered in a list macro to be used by the dowith package. If \langle cmd \rangle is in the list, it is set to work like \langle chars \rangle ⟨cmd⟩, and a macro \langcode will expand to ⟨chars⟩ (the respective tokens), usable in URLs.—The package is “generic,” based on plainpkg. The code has been used with morehype and catchdq (catcodes), but may be useful more generally.

Related packages: babel polyglossia

Keywords: languages other than English; German, macro programming (programming structures), hypertext

*This document describes version v0.2 of langcode.sty as of 2012/09/20.
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1 Installing and Calling

The file langcode.sty is provided ready, installation only requires putting it somewhere where \TeX\ finds it (which may need updating the filename database).

The packages dowith, plainpkg, and stacklet (catcodes) must be installed as well.

As to calling (loading): \texttt{langcode} is a "plainpkg package" in the sense of the \texttt{plainpkg}\footnote{ctan.org/pkg/plainpkg} documentation that you may consult for details. So roughly,

\begin{itemize}
  \item load it by \texttt{\usepackage{langcode}} if you can,
  \item otherwise by \texttt{\RequirePackage{langcode}} (perhaps from within another "plainpkg package"),
  \item or by \texttt{\input{langcode.sty}}
  \item or even by \texttt{\input{langcode.sty}} ...
\end{itemize}

\footnote{http://www.tex.ac.uk/cgi-bin/texfaq2html?label=inst-wlcf}
2 Header—plainpkg and Legalese

On the right hand side, that plainpkg.tex is loaded, before the package version is declared, for “generic” function:

```latex
\input plainpkg
\ProvidesPackage{langcode}[2012/09/20 v0.2 language adjustment (UL)]

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```

3 Required

langcode is based on dowith:

```latex
\RequirePackage{dowith}
```

4 General Commands

\texttt{\uselangcode{⟨lcode⟩}} sets \texttt{langcode} to \texttt{⟨lcode⟩}, runs \texttt{langcodeadjust} on the items stored in \texttt{langcodedependent}, and finally executes what is stored in \texttt{langcodeextras}:

```latex
\def\uselangcode#1{%
  \def\langcode{#1}% %% 2012/01/07:
  \DoWithAllIn\langcodeadjust\langcodedependent
  \langcodeextras}
```

\texttt{\langcodeadjust{⟨letters⟩}} defines \texttt{⟨letters⟩} to expand to \texttt{⟨lcode⟩⟨letters⟩}:

```latex
\def\langcodeadjust#1{%
  \edef#1{\expandafter\noexpand\csname\langcode\expandafter\@gobble\string#1\endcsname}}
```

```bash
% % < 2012/09/17 ->
% \edef#1{\withcsname\noexpand\langcode\expandafter\@gobble\string#1\endcsname}}
```
5 Sample Settings

Such settings once should be in some .cfg file TODO

5.1 What Must Be Varied
\texttt{\textbackslash langcode\textunderscore\textbackslash dependent} is a list of commands that must be adjusted:

\begin{verbatim}
29 \def\langcode\textunderscore\textbackslash dependent{%         %% 2012/01/07
30 \langcode\textunderscore\textbackslash extras\texttt{\dqtd\;\qtd\;\pardash\;\lastrev\;\totopofpage}
31 \monthname}                  %% 2012/01/17
\end{verbatim}

5.2 English vs. German

5.2.1 Months
\texttt{\textbackslash enmonthname\{(\textit{num})\}} yields the English name of the \textit{(num)}th month of the year:

\begin{verbatim}
32 \def\enmonthname#1{
33 \ifcase #1\or
34 January\or February\or March\or April\or
35 May\or June\or July\or August\or
36 September\or October\or November\or December%
37 \fi}
\end{verbatim}

\texttt{\textbackslash demonthname\{(\textit{num})\}} yields the German name of the \textit{(num)}th month of the year:

\begin{verbatim}
38 \def\demonthname#1{
39 \ifcase #1\or
40 Januar\or Februar\or M\"arz\or April\or
41 Mai\or Juni\or Juli\or August\or
42 September\or Oktober\or November\or Dezember%
43 \fi}
\end{verbatim}

5.2.2 Quotes

For \texttt{\textbackslash dqtd} settings, see (load) \texttt{\textbackslash catchdq\{catcodes\;bundle\}}\textsuperscript{3} \texttt{\textbackslash enqtd\{(en-text)\}} and \texttt{\textbackslash deqtd\{(de-text)\}} (overridable, e.g., with blog.sty):

\begin{verbatim}
44 \ifx\dqtd\undefined \def\dqtd#1{\glq#1\grq} \fi
45 \ifx\enqtd\undefined \def\enqtd#1{\textquoteleft#1\textquoteright} \fi
\end{verbatim}

You may get \texttt{\glq} and \texttt{\grq} from \texttt{ngerman.sty}

\begin{verbatim}
\uselangcode\{\texttt\{en\}\}
\end{verbatim}

if needed. Here is a little “\texttt{\textbackslash tessst \textquoteright\textbackslash inner}”, due to the default \texttt{\uselangcode\{\texttt\{en\}\}} we now issue \texttt{\uselangcode\{\texttt\{de\}\}} to get „tessst „inner““.\textsuperscript{3}

\textsuperscript{3}The test below required loading \texttt{\textbackslash catchdq\{earlier\}} than \texttt{langcode}.
5.2.3 Dashes

I introduced \texttt{\textemdash} thinking of (German „Gedankenstrich“ and) long dashes as a weak version of a paragraph break. A paragraph break somehow means moving from one thought to another—almost the same what a long dash may mean.—Here I have switched to ‘en’ again, in order to get \texttt{\enpardash} by \texttt{\enpardash}:

\begin{verbatim}
\ifx\enpardash\undefined \let\enpardash\textemdash \fi
\end{verbatim}

The „Gedankenstrich“ \texttt{\depardash} is not as long as the “thought dash” — erst nur halb so lang—but it is surrounded by regular spaces:

\begin{verbatim}
\ifx\depardash\undefined \def\depardash{ \textendash\space} \fi
\end{verbatim}

Some people prefer a so-called ‘hair space’ surrounding the long dash.

5.2.4 Wikipedia

The previous Wikipedia link was obtained by \texttt{\WikiRef{hair␣space}}, working like \texttt{\WikiienRef{hair␣space}}. This is an example of how \texttt{\uselangcode{two-chars}}.\texttt{\uselangcode{two-chars}}.

5.2.5 blog.sty

In the present sample of \texttt{\langcodedependent}, \texttt{\lastrev} and \texttt{\totopofpage} remain. I use them for HTML with blog.sty—sorry, at present I cannot afford separating settings for a wider audience from my own ones.

5.3 Other Settings

I haven’t used English extras so far:

\begin{verbatim}
\let\enlangcodeextras\empty %%% \empty 2012/01/17
\end{verbatim}

With German, I have used the \texttt{dhua} package for certain abbrevations:

\begin{verbatim}
\def\delangcodeextras{\RequirePackage{dhua}}
\end{verbatim}

However, this setting disables \texttt{\uselangcode{de}} after \texttt{\begin{document}}—which has not a problem with blog.sty, where I use it daily. For the tests above, I emptied \texttt{\delangcodeextras}. I had not thought of changing the language within one document before.

6 Default Language Code

The default \texttt{\langcode} is ‘en’ for English:

\begin{verbatim}
\uselangcode{en}
\end{verbatim}


7 LEAVING THE PACKAGE FILE

7 Leaving the Package File

8 VERSION HISTORY

v0.1 2012/01/07 in 'texblog.fdf'
2012/01/17

v0.2 2012/09/17 own plainpkg package (\newcommand -> \def, ...)
2012/09/20 doc. much expanded;
more blog-independent settings;
\Provides: v0.2, caption shortened (tld -> lc ->)