

1 The German language – new orthography

The file `ngermanb.dtx`¹ defines all the language definition macros for the German language with the ‘new orthography’ introduced in August 1998. This includes also the Austrian dialect of this language.

As with the ‘traditional’ German orthography, the character " is made active, and the commands in table ?? can be used, except for "ck and "ff etc., which are no longer required.

The internal language names are `ngerman` and `naustrian`.

When this file was read through the option `ngermanb` we make it behave as if `ngerman` was specified.

```
1 \def\bbl@tempa{ngermanb}
2 \ifx\CurrentOption\bbl@tempa
3   \def\CurrentOption{ngerman}
4 \fi
```

The macro `\LdfInit` takes care of preventing that this file is loaded more than once, checking the category code of the @ sign, etc.

```
5 \code
6 \LdfInit\CurrentOption{captions\CurrentOption}
```

When this file is read as an option, i.e., by the `\usepackage` command, `ngerman` will be an ‘unknown’ language, so we have to make it known. So we check for the existence of `\l@ngerman` to see whether we have to do something here.

```
7 \ifx\l@ngerman\undefined
8   \nopatterns{ngerman}
9   \adddialect\l@ngerman0
10 \fi
```

For the Austrian version of these definitions we just add another language.

```
11 \adddialect\l@naustrian\l@ngerman
```

The next step consists of defining commands to switch to (and from) the German language.

`\captionsngerman` Either the macro `\captionsngerman` or the macro `\captionsnaustrian` will define all strings used in the four standard document classes provided with L^AT_EX.

```
12 \@namedef{captions\CurrentOption}{%
13   \def\prefacename{Vorwort}%
14   \def\refname{Literatur}%
15   \def\abstractname{Zusammenfassung}%
16   \def\bibname{Literaturverzeichnis}%
17   \def\chaptername{Kapitel}%
18   \def\appendixname{Anhang}%
19   \def\contentsname{Inhaltsverzeichnis}% % oder nur: Inhalt
20   \def\listfigurename{Abbildungsverzeichnis}%
21   \def\listtablename{Tabellenverzeichnis}%
```

¹The file described in this section has version number v2.6n and was last revised on 2008/07/06.

```

22 \def\indexname{Index}%
23 \def\figurename{Abbildung}%
24 \def\tablename{Tabelle}%           % oder: Tafel
25 \def\partname{Teil}%
26 \def\enclname{Anlage(n)}%         % oder: Beilage(n)
27 \def\ccname{Verteiler}%           % oder: Kopien an
28 \def\headtoname{An}%
29 \def\pagename{Seite}%
30 \def\seename{siehe}%
31 \def\alsoname{siehe auch}%
32 \def\proofname{Beweis}%
33 \def\glossaryname{Glossar}%
34 }

```

`\datengerman` The macro `\datengerman` redefines the command `\today` to produce German dates.

```

35 \def\month@ngerman{\ifcase\month\or
36   Januar\or Februar\or M\"arz\or April\or Mai\or Juni\or
37   Juli\or August\or September\or Oktober\or November\or Dezember\fi}
38 \def\datengerman{\def\today{\number\day.\~\month@ngerman
39   \space\number\year}}

```

`\dateaustrian` The macro `\datenaustrian` redefines the command `\today` to produce Austrian version of the German dates.

```

40 \def\datenaustrian{\def\today{\number\day.\~\ifnum1=\month
41   J\"anner\else \month@ngerman\fi \space\number\year}}

```

`\extrasngerman` Either the macro `\extrasngerman` or the macros `\extrasnaustrian` will per-

`\extrasnaustrian` form all the extra definitions needed for the German language. The macro

`\noextrasngerman` `\noextrasngerman` is used to cancel the actions of `\extrasngerman`.

`\noextrasnaustrian` For German (as well as for Dutch) the " character is made active. This is done once, later on its definition may vary.

```

42 \initiate@active@char{"}
43 \@namedef{extras\CurrentOption}{%
44   \languageshortands{ngerman}}
45 \expandafter\addto\csname extras\CurrentOption\endcsname{%
46   \bbl@activate{"}}

```

Don't forget to turn the shortands off again.

```

47 \addto\noextrasngerman{\bbl@deactivate{"}}

```

In order for \TeX to be able to hyphenate German words which contain ‘ß’ (in the OT1 position $\sim Y$) we have to give the character a nonzero `\lccode` (see Appendix H, the \TeX book).

```

48 \expandafter\addto\csname extras\CurrentOption\endcsname{%
49   \babel@savevariable{\lccode25}%
50   \lccode25=25}

```

The umlaut accent macro `\"` is changed to lower the umlaut dots. The redefinition is done with the help of `\umlautlow`.

```

51 \expandafter\addto\csname extras\CurrentOption\endcsname{%
52   \babel@save"\umlautlow}
53 \@namedef{noextras\CurrentOption}{\umlauthigh}

```

The current version of the ‘new’ German hyphenation patterns (`dehyphn.tex` is to be used with `\lefthyphenmin` and `\righthyphenmin` set to 2.

```

54 \providehyphenmins{\CurrentOption}{\tw@}{\tw@}

```

For German texts we need to make sure that `\frenchspacing` is turned on.

```

55 \expandafter\addto\csname extras\CurrentOption\endcsname{%
56   \bbl@frenchspacing}
57 \expandafter\addto\csname noextras\CurrentOption\endcsname{%
58   \bbl@nonfrenchspacing}

```

The code above is necessary because we need an extra active character. This character is then used as indicated in table ??.

To be able to define the function of `"`, we first define a couple of ‘support’ macros.

`\dq` We save the original double quote character in `\dq` to keep it available, the math accent `\"` can now be typed as `"`.

```

59 \begingroup \catcode'\12
60 \def\x{\endgroup
61   \def\@SS{\mathchar"7019 }
62   \def\dq{"}}
63 \x

```

Now we can define the doublequote macros: the umlauts,

```

64 \declare@shorthand{ngerman}{a}{\textormath{"a}\allowhyphens}{\ddot a}}
65 \declare@shorthand{ngerman}{o}{\textormath{"o}\allowhyphens}{\ddot o}}
66 \declare@shorthand{ngerman}{u}{\textormath{"u}\allowhyphens}{\ddot u}}
67 \declare@shorthand{ngerman}{A}{\textormath{"A}\allowhyphens}{\ddot A}}
68 \declare@shorthand{ngerman}{O}{\textormath{"O}\allowhyphens}{\ddot O}}
69 \declare@shorthand{ngerman}{U}{\textormath{"U}\allowhyphens}{\ddot U}}

```

tremas,

```

70 \declare@shorthand{ngerman}{e}{\textormath{"e}{\ddot e}}
71 \declare@shorthand{ngerman}{E}{\textormath{"E}{\ddot E}}
72 \declare@shorthand{ngerman}{i}{\textormath{"i}{\ddot i}}%
73   {\ddot \imath}}
74 \declare@shorthand{ngerman}{I}{\textormath{"I}{\ddot I}}

```

german es-zet (sharp s),

```

75 \declare@shorthand{ngerman}{s}{\textormath{\ss}{\@SS{}}}
76 \declare@shorthand{ngerman}{S}{\SS}
77 \declare@shorthand{ngerman}{z}{\textormath{\ss}{\@SS{}}}
78 \declare@shorthand{ngerman}{Z}{SZ}

```

german and french quotes,

```

79 \declare@shorthand{ngerman}{" '}{\glqq}
80 \declare@shorthand{ngerman}{" '}{\grqq}

```

```

81 \declare@shorthand{ngerman}{"<"}{\flqq}
82 \declare@shorthand{ngerman}{">"}{\frqq}
and some additional commands:
83 \declare@shorthand{ngerman}{"-"}{\nobreak\-\bbl@allowhyphens}
84 \declare@shorthand{ngerman}{"}"}{\%
85   \textormath{\penalty\@M\discretionary{-}{-}{\kern.03em}%
86     \allowhyphens}{}}
87 \declare@shorthand{ngerman}{""}{\hskip\z@skip}
88 \declare@shorthand{ngerman}{ "~"}{\textormath{\leavevmode\hbox{-}}{-}}
89 \declare@shorthand{ngerman}{ "="}{\penalty\@M-\hskip\z@skip}

```

`\mdqon` All that's left to do now is to define a couple of commands for reasons of compatibility with `german.sty`.

```

90 \def\mdqon{\shorthandon{}}
91 \def\mdqoff{\shorthandoff{}}

```

The macro `\ldf@finish` takes care of looking for a configuration file, setting the main language to be switched on at `\begin{document}` and resetting the category code of `@` to its original value.

```

92 \ldf@finish\CurrentOption
93 \code

```