

# 1 The Norwegian language

The file `norsk.dtx`<sup>1</sup> defines all the language definition macros for the Norwegian language as well as for an alternative variant ‘nynorsk’ of this language.

For this language the character `"` is made active. In table 1 an overview is given of its purpose.

<code>"ff</code>	for <code>ff</code> to be hyphenated as <code>ff-f</code> , this is also implemented for <code>b</code> , <code>d</code> , <code>f</code> , <code>g</code> , <code>l</code> , <code>m</code> , <code>n</code> , <code>p</code> , <code>r</code> , <code>s</code> , and <code>t</code> . ( <code>o"ppussing</code> )
<code>"ee</code>	Hyphenate <code>"ee</code> as <code>\'e-e</code> . ( <code>komit"een</code> )
<code>"-</code>	an explicit hyphen sign, allowing hyphenation in the composing words. Use this for compound words when the hyphenation patterns fail to hyphenate properly. ( <code>alpin"-anlegg</code> )
<code>" </code>	Like <code>"-</code> , but inserts 0.03em space. Use it if the compound point is spanned by a ligature. ( <code>hoff" intriger</code> )
<code>""</code>	Like <code>"-</code> , but producing no hyphen sign. ( <code>i""g\aa{r}</code> )
<code>"~</code>	Like <code>-</code> , but allows no hyphenation at all. ( <code>E"~cup</code> )
<code>"=</code>	Like <code>-</code> , but allowing hyphenation in the composing words. ( <code>marksistisk"=leninistisk</code> )
<code>"&lt;</code>	for French left double quotes (similar to <code>&lt;&lt;</code> ).
<code>"&gt;</code>	for French right double quotes (similar to <code>&gt;&gt;</code> ).

Table 1: The extra definitions made by `norsk.sty`

Rune Kleveland distributes a Norwegian dictionary for `ispell` (570000 words). It can be found at <http://www.uio.no/~runekl/dictionary.html>.

This dictionary supports the spellings `spi"sslede` for ‘spisslede’ (hyphenated `spiss-slede`) and other such words, and also suggest the spelling `spi"sslede` for ‘spisslede’ and ‘spisslede’.

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

```
1 {*code}
2 \LdfInit\CurrentOption{captions\CurrentOption}
```

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

```
3 \ifx\l@norsk\@undefined
4   \@nopatterns{Norsk}
5   \addialect\l@norsk0\fi
```

---

<sup>1</sup>The file described in this section has version number `v2.0i` and was last revised on 2012/08/06. Contributions were made by Haavard Helstrup (`HAAVARD@CERNVM`) and Alv Kjetil Holme (`HOLMEA@CERNVM`); the ‘nynorsk’ variant has been supplied by Per Steinar Iversen (`iversen@vxcern.cern.ch`) and Terje Engeset Petterst (`TERJEEP@VSFYS1.FI.UIB.NO`); the shorthand definitions were provided by Rune Kleveland (`runekl@math.uio.no`).

`\norskhyphenmins` Some sets of Norwegian hyphenation patterns can be used with `\lefthyphenmin` set to 1 and `\righthyphenmin` set to 2, but the most common set `nohyph.tex` can't. So we use `\lefthyphenmin=2` by default.

```
6 \providehyphenmins{\CurrentOption}{\tw@\tw@}
```

Now we have to decide which version of the captions should be made available. This can be done by checking the contents of `\CurrentOption`.

```
7 \def\bbl@tempa{norsk}
8 \ifx\CurrentOption\bbl@tempa
```

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

`\captionsnorsk` The macro `\captionsnorsk` defines all strings used in the four standard documentclasses provided with L<sup>A</sup>T<sub>E</sub>X.

```
9 \def\captionsnorsk{%
10 \def\prefacename{Forord}%
11 \def\refname{Referanser}%
12 \def\abstractname{Sammendrag}%
13 \def\bibName{Bibliografi}% or Litteraturoversikt
14 % or Litteratur or Referanser
15 \def\chaptername{Kapittel}%
16 \def\appendixname{Tillegg}% or Appendiks
17 \def\contentsname{Innhold}%
18 \def\listfigurename{Figurer}% or Figurliste
19 \def\listtablename{Tabeller}% or Tabelliste
20 \def\indexname{Register}%
21 \def\figurename{Figur}%
22 \def\tablename{Tabell}%
23 \def\partname{Del}%
24 \def\enclname{Vedlegg}%
25 \def\ccname{Kopi sendt}%
26 \def\headtoname{Til}% in letter
27 \def\pagename{Side}%
28 \def\seename{Se}%
29 \def\alsoname{Se ogs\aa{}}%
30 \def\proofname{Bevis}%
31 \def\glossaryname{Ordliste}%
32 }
33 \else
```

For the 'nynorsk' version of these definitions we just add a "dialect".

```
34 \adddialect\l@nynorsk\l@norsk
```

`\captionsnynorsk` The macro `\captionsnynorsk` defines all strings used in the four standard documentclasses provided with L<sup>A</sup>T<sub>E</sub>X, but using a different spelling than in the command `\captionsnorsk`.

```
35 \def\captionsnynorsk{%
36 \def\prefacename{Forord}%
```

```

37 \def\refname{Referansar}%
38 \def\abstractname{Samandrag}%
39 \def\bibName{Litteratur}% or Litteraturoversyn
40 % or Referansar
41 \def\chaptername{Kapittel}%
42 \def\appendixname{Tillegg}% or Appendiks
43 \def\contentsname{Innhald}%
44 \def\listfigurename{Figurar}% or Figurliste
45 \def\listtablename{Tabellar}% or Tabelliste
46 \def\indexname{Register}%
47 \def\figurename{Figur}%
48 \def\tablename{Tabell}%
49 \def\partname{Del}%
50 \def\enclname{Vedlegg}%
51 \def\ccname{Kopi til}%
52 \def\headtoname{Til}% in letter
53 \def\pagename{Side}%
54 \def\seename{Sj\aa{}}%
55 \def\alsoname{Sj\aa{ } \‘{o}g}%
56 \def\proofname{Bevis}%
57 \def\glossaryname{Ordliste}%
58 }
59 \fi

```

`\datenorsk` The macro `\datenorsk` redefines the command `\today` to produce Norwegian dates.

```

60 \@namedef{date\CurrentOption}{%
61 \def\today{\number\day.~\ifcase\month\or
62 januar\or februar\or mars\or april\or mai\or juni\or
63 juli\or august\or september\or oktober\or november\or
64 desember\fi
65 \space\number\year}}

```

`\extrasnorsk` The macro `\extrasnorsk` will perform all the extra definitions needed for the Norwegian language. The macro `\noextrasnorsk` is used to cancel the actions of `\extrasnorsk`.

Norwegian typesetting requires `\frenchspacing` to be in effect.

```

66 \@namedef{extras\CurrentOption}{\bbl@frenchspacing}
67 \@namedef{noextras\CurrentOption}{\bbl@nonfrenchspacing}

```

For Norsk the " character is made active. This is done once, later on its definition may vary.

```

68 \initiate@active@char{"}
69 \expandafter\addto\csname extras\CurrentOption\endcsname{%
70 \languageshorthands{norsk}}
71 \expandafter\addto\csname extras\CurrentOption\endcsname{%
72 \bbl@activate{"}}

```

Don't forget to turn the shorthands off again.

```
73 \expandafter\addto\csname noextras\CurrentOption\endcsname{%
74 \bbl@deactivate{"}}
```

The code above is necessary because we need to define a number of shorthand commands. These shorthand commands are then used as indicated in table 1.

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 " .

```
75 \begingroup \catcode'\ "12
76 \def\x{\endgroup
77 \def\@SS{\mathchar"7019 }
78 \def\dq{"}}
79 \x
```

Now we can define the discretionary shorthand commands. The number of words where such hyphenation is required is for each character

b	d	f	g	k	l	n	p	r	s	t
4	4	15	3	43	30	8	12	1	33	35

taken from a list of 83000 ispell-roots.

```
80 \declare@shorthand{norsk}{"b}{\textormath{\bbl@disc b{bb}}{b}}
81 \declare@shorthand{norsk}{"B}{\textormath{\bbl@disc B{BB}}{B}}
82 \declare@shorthand{norsk}{"d}{\textormath{\bbl@disc d{dd}}{d}}
83 \declare@shorthand{norsk}{"D}{\textormath{\bbl@disc D{DD}}{D}}
84 \declare@shorthand{norsk}{"e}{\textormath{\bbl@disc e{\'e}}{}}
85 \declare@shorthand{norsk}{"E}{\textormath{\bbl@disc E{\'E}}{}}
86 \declare@shorthand{norsk}{"F}{\textormath{\bbl@disc F{FF}}{F}}
87 \declare@shorthand{norsk}{"g}{\textormath{\bbl@disc g{gg}}{g}}
88 \declare@shorthand{norsk}{"G}{\textormath{\bbl@disc G{GG}}{G}}
89 \declare@shorthand{norsk}{"k}{\textormath{\bbl@disc k{kk}}{k}}
90 \declare@shorthand{norsk}{"K}{\textormath{\bbl@disc K{KK}}{K}}
91 \declare@shorthand{norsk}{"l}{\textormath{\bbl@disc l{ll}}{l}}
92 \declare@shorthand{norsk}{"L}{\textormath{\bbl@disc L{LL}}{L}}
93 \declare@shorthand{norsk}{"n}{\textormath{\bbl@disc n{nn}}{n}}
94 \declare@shorthand{norsk}{"N}{\textormath{\bbl@disc N{NN}}{N}}
95 \declare@shorthand{norsk}{"p}{\textormath{\bbl@disc p{pp}}{p}}
96 \declare@shorthand{norsk}{"P}{\textormath{\bbl@disc P{PP}}{P}}
97 \declare@shorthand{norsk}{"r}{\textormath{\bbl@disc r{rr}}{r}}
98 \declare@shorthand{norsk}{"R}{\textormath{\bbl@disc R{RR}}{R}}
99 \declare@shorthand{norsk}{"s}{\textormath{\bbl@disc s{ss}}{s}}
100 \declare@shorthand{norsk}{"S}{\textormath{\bbl@disc S{SS}}{S}}
101 \declare@shorthand{norsk}{"t}{\textormath{\bbl@disc t{tt}}{t}}
102 \declare@shorthand{norsk}{"T}{\textormath{\bbl@disc T{TT}}{T}}
```

We need to treat "f a bit differently in order to preserve the ff-ligature.

```
103 \declare@shorthand{norsk}{"f}{\textormath{\bbl@discff}{f}}
104 \def\bbl@discff{\penalty\@M}
```

```

105 \afterassignment\bbl@insertff \let\bbl@nextff= }
106 \def\bbl@insertff{%
107 \if f\bbl@nextff
108 \expandafter\@firstoftwo\else\expandafter\@secondoftwo\fi
109 {\relax\discretionary{ff-}{f}{ff}\allowhyphens}{f\bbl@nextff}}
110 \let\bbl@nextff=f

```

We now define the French double quotes and some commands concerning hyphenation:

```

111 \declare@shorthand{norsk}{"<"}{\flqq}
112 \declare@shorthand{norsk}{">"}{\frqq}
113 \declare@shorthand{norsk}{"-"}{\penalty\M-\bbl@allowhyphens}
114 \declare@shorthand{norsk}{"|"}{%
115 \textormath{\penalty\M\discretionary{-}{-}{\kern.03em}%
116 \allowhyphens}{}}
117 \declare@shorthand{norsk}{""}{\hskip\z@skip}
118 \declare@shorthand{norsk}{"~"}{\textormath{\leavevmode\hbox{-}}{-}}
119 \declare@shorthand{norsk}{"="}{\penalty\M-\hskip\z@skip}

```

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.

```

120 \ldf@finish\CurrentOption
121 \code

```