The Turkish style for babel

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1   The Turkish language

The file `turkish.dtx`[1] defines all the language definition macros for the Turkish language[2].

Turkish typographic rules specify that a little 'white space' should be added before the characters ':', '!' and '='. In order to insert this white space automatically these characters are made 'active'. Also `\frenhspacing` is set.

Typical usage with pdfTEX is:

```
\usepackage[T1]{fontenc}
\usepackage[utf8]{inputenc} % also latin5
\usepackage[turkish]{babel}
```

The = shorthand is potentially dangerous. You can deactivate with the babel option `shorthands` or with `\shorthandoff`:

```
\usepackage[turkish,shorthands=:!]{babel}
```

This style doesn't handle the fi ligature (yet). You can break it by hand with `f{}i` or `f{\kern0pt}i`, but this can be done automatically, too. With pdfTEX and monolingual documents, use microtype, as for example:

```
\usepackage{microtype}
\DisableLigatures[f]{encoding = *, family = *}
```

With XeTEX, ligatures are handled internally by the font, provided the corresponding feature has been implemented (not all fonts do); e. g.:

```
\usepackage{fontspec}
\setmainfont[Language=Turkish]{Iwona}
```

With LuaTEX you can use either method (remember with microtype you have also to set `Renderer=Basic`, at least at the time of this writing). Alternative approachs with LuaTEX are the setnolig package or a `fea` file (not provided here).

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[1]The file described in this section has version number v1.3b and was last revised on 2014/03/22.

[2]Mustafa Burc, `z6001@rziris01.rrz.uni-hamburg.de` provided the code for this file. It is based on the work by Pierre Mackay; Turgut Uyar, `uyar@cs.itu.edu.tr` supplied additional translations in version 1.2j and later. Version 1.3 was prepared by Javier Bezos.

The code

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{turkish}\captionsturkish
```

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

```
3 \ifx\l@turkish\@undefined
4   \@nopatterns{Turkish}
5   \adddialect\l@turkish0\fi
```

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

\captionsturkish   The macro \captionsturkish defines all strings used in the four standard documentclasses provided with LaTeX.

```
6 \addto\captionsturkish{%
7   \def\prefacename{\"Ons\"oz}%
8   \def\refname{Kaynaklar}%
9   \def\abstractname{\"Ozet}%
10   \def\bibname{Kaynak\c ca}%
11   \def\chaptername{B\"ol\"um}%
12   \def\appendixname{Ek}%
13   \def\contentsname{\.I\c cindekiler}%
14   \def\listfigurename{\c Sekil Listesi}%
15   \def\listtablename{Tablo Listesi}%
16   \def\indexname{Dizin}%
17   \def\figurename{\c Sekil}%
18   \def\tablename{Tablo}%
19   \def\partname{K\i s\i m}%
20   \def\enclname{\.Ili\c sik}%
21   \def\ccname{Di\u ger Al\i c\i lar}%
22   \def\headtoname{Al\i c\i}%
23   \def\pagename{Sayfa}%
24   \def\subjectname{\.Ilgili}%
25   \def\seename{bkz.}%
26   \def\alsoname{ayr\i ca bkz.}%
27   \def\proofname{Kan\i t}%
28   \def\glossaryname{L\"ugat\c ce}% <-- Tentative
29 }%
```

\dateturkish   The macro \dateturkish redefines the command \today to produce Turkish dates.

```
30 \def\dateturkish{%
31   \def\today{\number\day~\ifcase\month\or
32     Ocak\or \c Subat\or Mart\or Nisan\or May\i s\or Haziran\or
```

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```
33    Temmuz\or A\u gustos\or Eyl\"ul\or Ekim\or Kas\i m\or
34    Aral\i k\fi
35    \space\number\year}}
```

The following code is taken into account only with babel 3.9g and later. Defines case and hyphen mapping, as well as UTF-8 strings. First the Unicode branch.

```
36 \ifx\BabelLower\@undefined\else
37 \StartBabelCommands*{turkish}{captions}
38   [unicode, charset=utf8, fontenc=EU1 EU2]
39   \SetString\prefacename{Önsöz}
40   \SetString\refname{Kaynaklar}
41   \SetString\abstractname{Özet}
42   \SetString\bibname{Kaynakça}
43   \SetString\chaptername{Bölüm}
44   \SetString\appendixname{Ek}
45   \SetString\contentsname{İçindekiler}
46   \SetString\listfigurename{Şekil Listesi}
47   \SetString\listtablename{Tablo Listesi}
48   \SetString\indexname{Dizin}
49   \SetString\figurename{Şekil}
50   \SetString\tablename{Tablo}
51   \SetString\partname{Kısım}
52   \SetString\enclname{İlişik}
53   \SetString\ccname{Diğer Alıcılar}
54   \SetString\headtoname{Alıcı}
55   \SetString\pagename{Sayfa}
56   \SetString\subjectname{İlgili}
57   \SetString\seename{bkz.}
58   \SetString\alsoname{ayrıca bkz.}
59   \SetString\proofname{Kanıt}
60   \SetString\glossaryname{Lügatçe}% <-- Tentative
61   \SetCase
62     {\uccode`i=`İ\relax
63      \uccode`ı=`I\relax}
64     {\lccode`İ=`i\relax
65      \lccode`I=`ı\relax}
66   \SetHyphenMap{%
67     \BabelLower{`İ}{`i}%
68     \BabelLower{`I}{`ı}}
69 \StartBabelCommands*{turkish}{date}
70   [unicode, charset=utf8, fontenc=EU1 EU2]
71   \SetStringLoop{month#1name}{%
72     Ocak,Şubat,Mart,Nisan,Mayıs,Haziran,%
73     Temmuz,Ağustos,Eylül,Ekim,Kasım,Aralık}
```

Now the OT1 branch, only partially, because this encoding is not suited for Turkish (no dotted I).

```
74 \StartBabelCommands{turkish}{}[ot1enc, fontenc=OT1]
75   \SetCase
76     {\uccode"10=`I\relax}
77     {\lccode`I="10\relax}
```

And finally, the generic branch, using the LICR and assuming T1.

```
78 \StartBabelCommands*{turkish}{captions}
79   \SetString\prefacename{\"Ons\"oz}
80   \SetString\refname{Kaynaklar}
81   \SetString\abstractname{\"Ozet}
82   \SetString\bibname{Kaynak\c ca}
83   \SetString\chaptername{B\"ol\"um}
84   \SetString\appendixname{Ek}
85   \SetString\contentsname{\.I\c cindekiler}
86   \SetString\listfigurename{\c Sekil Listesi}
87   \SetString\listtablename{Tablo Listesi}
88   \SetString\indexname{Dizin}
89   \SetString\figurename{\c Sekil}
90   \SetString\tablename{Tablo}
91   \SetString\partname{K\i s\i m}
92   \SetString\enclname{\.Ili\c sik}
93   \SetString\ccname{Di\u ger Al\i c\i lar}
94   \SetString\headtoname{Al\i c\i}
95   \SetString\pagename{Sayfa}
96   \SetString\subjectname{\.Ilgili}
97   \SetString\seename{bkz.}
98   \SetString\alsoname{ayr\i ca bkz.}
99   \SetString\proofname{Kan\i t}
100  \SetString\glossaryname{L\"ugat\c ce}% <-- Tentative
101  \SetCase
102    {\uccode`i="9D\relax
103     \uccode"19=`I\relax}
104    {\lccode"9D=`i\relax
105     \lccode`I="19\relax}
106  \SetHyphenMap{%
107    \BabelLower{"9D}{`i}%
108    \BabelLower{`I}{"19}}
109 \StartBabelCommands*{turkish}{date}
110  \SetStringLoop{month#1name}{%
111    Ocak,\c Subat,Mart,Nisan,May\i s,Haziran,%
112    Temmuz,A\u gustos,Eyl\"ul,Ekim,Kas\i m,Aral\i k}
113  \SetString\today{%
114    \number\day~\@nameuse{month\romannumeral\month name}%
115    \space\number\year}
116 \EndBabelCommands
117 \fi
```

\extrasturkish The macro \extrasturkish will perform all the extra definitions needed for the
\noextrasturkish Turkish language. The macro \noextrasturkish is used to cancel the actions of
\extrasturkish.

Turkish typographic rules specify that a little 'white space' should be added before the characters ':', '!' and '='. In order to insert this white space automatically these characters are made \active, so they have to be treated in a special way.

4

```
118 \initiate@active@char{:}
119 \initiate@active@char{!}
```

We specify that the turkish group of shorthands should be used. These characters are 'turned on' once, later their definition may vary.

```
120 \addto\extrasturkish{%
121   \languageshorthands{turkish}%
122   \bbl@activate{:}%
123   \bbl@activate{!}%
124   \bbl@activate{=}%
125   \bbl@frenchspacing}
```

For Turkish texts \frenchspacing should be in effect. We make sure this is the case and reset it if necessary.

```
126 \addto\noextrasturkish{\bbl@nonfrenchspacing}
```

`\turkish@sh@!@`
`\turkish@sh@=@`
`\turkish@sh@:@`

The definitions for the three active characters were made using intermediate macros. These are defined now. The insertion of extra 'white space' should only happen outside math mode, hence the check \ifmmode in the macros.

```
127 \declare@shorthand{turkish}{:}{%
128   \ifmmode
129     \string:%
130   \else\relax
131     \ifhmode
132       \ifdim\lastskip>\z@
133         \unskip\penalty\@M\thinspace
134       \fi
135     \fi
136     \string:%
137   \fi}
138 \declare@shorthand{turkish}{!}{%
139   \ifmmode
140     \string!%
141   \else\relax
142     \ifhmode
143       \ifdim\lastskip>\z@
144         \unskip\penalty\@M\thinspace
145       \fi
146     \fi
147     \string!%
148   \fi}
149 \initiate@active@char{=}
150 \declare@shorthand{turkish}{=}{%
151   \ifmmode
152     \string=%
153   \else\relax
154     \ifhmode
155       \ifdim\lastskip>\z@
156         \unskip\kern\fontdimen2\font
157         \kern-1.4\fontdimen3\font
```

```
158        \fi
159      \fi
160      \string=%
161    \fi}
```

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.

```
162 \ldf@finish{turkish}
163 ⟨/code⟩
```