

The Turkish style for babel

Mustafa Burc, Johannes Braams, Javier Bezos

January 14, 2014

1 The Turkish language

The file `turkish.dtx`¹ defines all the language definition macros for the Turkish language².

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 approaches with LuaTeX are the `setnolig` package or a `fea` file (not provided here).

¹The file described in this section has version number v1.3a and was last revised on 2014/01/14.

²Mustafa 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 L^AT_EX.

```
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\encname{\.Ili\c sik}%
21  \def\ccname{Di\u ger Al\i c\i lar}%
22  \def\headtoname{Al\i c\i i}%
23  \def\pagename{Sayfa}%
24  \def\subjectname{\.Ilgili}%
25  \def\seename{bkz.}%
26  \def\alsofname{ayr\i ca bkz.}%
27  \def\proofname{Kan\i t}%
28  \def\glossaryname{L\"ugat\c ce}%
29 }% <- Tentative
```

`\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
```

```

33     Temmuz\or A\u gustos\or Eyl\u 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\SetHyphenMap\@undefined\else
37 \ifx\@iforloop\@undefined\else
38 \StartBabelCommands*{turkish}{captions}
39   [unicode, charset=utf8, fontenc=EU1 EU2]
40   \SetString\prefacename{\\"Onsöz}
41   \SetString\refname{Kaynaklar}
42   \SetString\abstractname{\\"Özet}
43   \SetString\bibname{Kaynakça}
44   \SetString\chaptername{Bölüm}
45   \SetString\appendixname{Ek}
46   \SetString\contentsname{\\"İçindekiler}
47   \SetString\listfigurename{\\"Şekil Listesi}
48   \SetString\listtablename{\\"Tabelo Listesi}
49   \SetString\indexname{Dizin}
50   \SetString\figurename{\\"Şekil}
51   \SetString\tablename{\\"Tabelo}
52   \SetString\partname{K\xf6sim}
53   \SetString\enclname{\\"Ilişik}
54   \SetString\ccname{\\"Di\xf6er Al\xf6ic\xf6l}
55   \SetString\headtoname{\\"Al\xf6ci}
56   \SetString\pagename{Sayfa}
57   \SetString\subjectname{\\"Ilgili}
58   \SetString\seename{bkz.}
59   \SetString\alsoname{\\"ayr\xf6ica bkz.}
60   \SetString\proofname{Kan\xf6it}
61   \SetString\glossaryname{\\"L\xf6gat\xf6e}%
62   \SetCase
63     {\uccode`i='\i\relax
64      \uccode`i='\I\relax}
65     {\lccode`\i='i\relax
66      \lccode`\I='\i\relax}
67   \SetHyphenMap{%
68     \BabelLower{'\i}{'\i}%
69     \BabelLower{'\I}{'\i}%
70 \StartBabelCommands*{turkish}{date}
71   [unicode, charset=utf8, fontenc=EU1 EU2]
72   \SetStringLoop{month#1name}{%
73     Ocak,Şubat,Mart,Nisan,May\xf6s,Haziran,%
74     Temmuz,A\xf6ustos,Eyl\xf6l,Ekim,Kas\xf6im,Aral\xf6k}

```

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

```

75 \StartBabelCommands{turkish}{}[ot1enc, fontenc=OT1]
76   \SetCase

```

```

77      {\uccode"10='I\relax}
78      {\lccode'I="10\relax}

79 \StartBabelCommands*{turkish}{captions}
80   \SetString{prefacename}{\Ons\"oz}
81   \SetString{refname}{Kaynaklar}
82   \SetString{abstractname}{\"Ozet}
83   \SetString{bibname}{Kaynak\c ca}
84   \SetString{chaptername}{B\"ol\"um}
85   \SetString{appendixname}{Ek}
86   \SetString{contentsname}{..I\c c indekiler}
87   \SetString{listfigurename}{\c Sekil Listesi}
88   \SetString{listtablename}{Tabelo Listesi}
89   \SetString{indexname}{Dizin}
90   \SetString{figurename}{\c Sekil}
91   \SetString{tablename}{Tabelo}
92   \SetString{partname}{K\i s\i m}
93   \SetString{enclname}{\.Ili\c sik}
94   \SetString{ccname}{Di\u ger Al\i c\i lar}
95   \SetString{headtoname}{Al\i c\i}
96   \SetString{pagename}{Sayfa}
97   \SetString{subjectname}{\.Ilgili}
98   \SetString{seename}{bkz.}
99   \SetString{alsoname}{ayr\i ca bkz.}
100  \SetString{proofname}{Kan\i t}
101  \SetString{glossaryname}{L\"ugat\c ce}%
102  \SetCase
103    {\uccode'i="9D\relax
104     \uccode'19='I\relax}
105    {\lccode"9D='i\relax
106     \lccode'I="19\relax}
107    \SetHyphenMap{%
108      \BabelLower{"9D}{`i}%
109      \BabelLower{'I}{19}}
110 \StartBabelCommands*{turkish}{date}
111   \SetStringLoop{month#1name}{%
112     Ocak,\c Subat,Mart,Nisan,May\i s,Haziran,%
113     Temmuz,A\u gustos,Eyl\"ul,Ekim,Kas\i m,Aral\i k}
114   \SetString{today}{%
115     \number\day~\@nameuse{month\romannumeral\month name}%
116     \space\number\year}
117 \EndBabelCommands
118 \fi\fi

```

\extrasturkish The macro **\extrasturkish** will perform all the extra definitions needed for the 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 automat-

ically these characters are made `\active`, so they have to be treated in a special way.

```
119 \initiate@active@char{::}
120 \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.

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

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

```
127 \addto\noextrasturkish{\bb@nonfrenchspacing{}}
```

`\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.

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

```
157      \unskip\kern\fondimen2\font
158      \kern-1.4\fondimen3\font
159      \fi
160      \fi
161      \string=%
162  \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.

```
163 \ldf@finish{turkish}
164 </code>
```