The **bidi** Package

http://bitbucket.org/vafa/bidi

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Contents

1   Introduction

bidi provides a convenient interface for typesetting bidirectional texts with XeLaTeX and LuaLaTeX[1]. The package includes adaptations for use with many other commonly-used packages.

The bidi package at the moment only works with both XeTeX and LuaTeX engines, but we will support other TeX engines as well in the future.

1.1   bidi Info On The Terminal and In The Log File

If you use bidi package to write any input TeX document, and then run `xelatex` on your document, bidi writes some information about itself to the terminal and to the log file. The information is something like:

```
bidi package (Support for bidirectional typesetting with XeLaTeX and
    LuaLaTeX)
Description: A convenient interface for typesetting bidirectional
texts with XeLaTeX and LuaLaTeX. The package includes adaptations for use
with many other commonly-used packages.
Copyright (c) 2009-2010 Vafa Khalighi
v1.0.9, <commit 42>, 2010/07/25
License: LaTeX Project Public License, version 1.3c or higher (your choice
    )
Home: http://bitbucket.org/vafa/bidi
Location on CTAN: /macros/latex/contrib/bidi
```

2   Basics

2.1   Loading The Package

You can load the package in the ordinary way;

---

1. At present support for LuaTeX is not present but it will be added when LuaTeX 0.70 is released. This is because that direction support of LuaTeX in 0.70 will be backward incompatible with 0.60.

```
\usepackage [Options] {bidi}
```

Where options of the package are explained later in subsection 2.3.

When loading the package, it is important to know that:

❶   bidi should be the last package that you load, because otherwise you are certainly going to overwrite bidi's definitions and consequently, you will not get the expected output.

❷   In fact, bidi makes sure that some specific packages are loaded before bidi; these are those packages that bidi modifies them for bidirectional typesetting. If you load bidi before any of these packages, then you will get an error saying that you should load bidi as your last package.

For instance, consider the following minimal example:

```
1  \documentclass{minimal}
2  \usepackage{bidi}
3  \usepackage{graphicx}
4  \begin{document}
5  This is just a test.
6  \end{document}
```

Where graphicx is loaded after bidi. If you run xelatex on this document, you will get an error which looks like this:

```
! Package bidi Error: Oops! you have loaded package graphicx after
    bidi package
. Please load package graphicx before bidi package, and then try to
    run xelatex
 on your document again.

See the bidi package documentation for explanation.
Type  H <return> for immediate help.
 ...

l.4 \begin{document}
```

2.2   Commands for Version number, Mercurial commit number and Date of The Package

```
\bidiversion  \bidicommit  \bididate
```

☞   \bidiversion gives the current version of the package.

☞   \bidicommit gives the current Mercurial commit number of the package.

☞   \bididate gives the current date of the package.

```
1  \documentclass{article}
2  \usepackage{bidi}
3  \begin{document}
4  This is typeset by \textsf{bidi} package, \bidiversion, \bidicommit, \
      bididate.
5  \end{document}
```

2.3 Options of The Package

There are two options, namely `RTLdocument` and `rldocument`, which are essentialy equivalent. If you pass any of these options to the package, you will be typesetting a document containing mainly RTL texts with some LTR texts. These options activate `\setRTL` (explained in subsection 2.4), `\RTLdblcol` (explained in subsection 2.8) and `\autofootnoterule` (explained in subsubsection 2.7.1).

It is clear that if you do not pass any of these options to the package, you will be typesetting a document containing mainly LTR texts with some RTL texts.

2.4 Paragraph Switching Commands

```
\setLTR   \setLR   \unsetRL   \unsetRTL
\setRTL   \setRL   \unsetLTR
```

☞   With any of the commands in the first row, you can typeset LTR paragraphs.

☞   With any of the commands in the second row, you can typeset RTL paragraphs.

```
1  \documentclass{article}
2  \usepackage{bidi}
3  \begin{document}
4  \setRTL%
5  Anyone who reads Old and Middle English literary texts will be
6   familiar with the mid-brown volumes of the EETS, with the symbol
7   of Alfred's jewel embossed on the front cover.
8
9  \setLTR% Notice the blank line before \setLTR
10 Anyone who reads Old and Middle English literary texts will be
11  familiar with the mid-brown volumes of the EETS, with the symbol
12  of Alfred's jewel embossed on the front cover.
13 \end{document}
```

2.5 Pargraph Switching Environments

```
\begin{LTR}   ⟨text⟩   \end{LTR}
\begin{RTL}   ⟨text⟩   \end{RTL}
```

☞   With LTR environment, you can typeset LTR paragraphs.

☞   With RTL environment, you can typeset RTL paragraphs.

```
1  \documentclass{article}
2  \usepackage{bidi}
3  \begin{document}
4  \begin{RTL}
5  Anyone who reads Old and Middle English literary texts will be familiar
6   with the mid-brown volumes of the EETS, with the symbol
7   of Alfred's jewel embossed on the front cover.
8  \begin{LTR}
9  Anyone who reads Old and Middle English literary texts will be familiar
10  with the mid-brown volumes of the EETS, with the symbol
11  of Alfred's jewel embossed on the front cover.
```

```
12   \end{LTR}
13   And we are still typesetting RTL.
14   \end{RTL}
15   \end{document}
```

2.6 Typesetting Short LTR and RTL Texts

```
\LRE{⟨text⟩}    \LR{⟨text⟩}
\RLE{⟨text⟩}    \RL{⟨text⟩}
```

☞   With any of the commands in the first row, you can typeset short LTR text
      inside RTL paragraphs.

☞   With any of the commands in the second row, you can typeset short RTL
      text inside LTR paragraphs.

```
1    \begin{document}
2    \begin{RTL}
3    Anyone who reads Old and Middle English \LRE{Short LTR text} literary
         texts will be familiar
4     with the mid-brown volumes of the EETS, with the symbol
5     of Alfred's jewel embossed on the front cover.
6    \begin{LTR}
7    Anyone who reads Old and Middle English \RLE{Short RTL text} literary
         texts will be familiar
8     with the mid-brown volumes of the EETS, with the symbol
9     of Alfred's jewel embossed on the front cover.
10   \end{LTR}
11   \end{RTL}
12   \end{document}
```

2.7 Footnotes

```
\footnote [num] {⟨text⟩}   \LTRfootnote [num] {⟨text⟩}   \RTLfootnote [num] {⟨text⟩}
\setfootnoteRL   \setfootnoteLR   \unsetfootnoteRL
\thanks{⟨text⟩}   \LTRthanks{⟨text⟩}   \RTLthanks{⟨text⟩}
```

☞   \footnote in RTL mode produces an RTL footnote while in LTR mode it
      produces an LTR footnote.

☞   \LTRfootnote will always produce an LTR footnote, independent on the cur-
      rent mode.

☞   \RTLfootnote will always produce an RTL footnote, independent on the cur-
      rent mode.

☞   Specifying a \setfootnoteRL command anywhere will make \footnote pro-
      duce an RTL footnote.

☞   Specifying either a \setfootnoteLR or an \unsetfootnoteRL command any-
      where will make \footnote produce an LTR footnote.

☞   \thanks (to be used only inside \author or \title argument) in RTL mode
      produces an RTL footnote while in LTR mode it produces an LTR footnote.

☞   \LTRthanks (to be used only inside \author or \title argument) will always produce an LTR footnote, independent on the current mode.

☞   \RTLthanks (to be used only inside \author or \title argument) will always produce an RTL footnote, independent on the current mode.

\footnotetext [num] {⟨text⟩}   \LTRfootnotetext [num] {⟨text⟩}
\RTLfootnotetext [num] {⟨text⟩}

☞   \footnotetext used in conjunction with \footnotemark, in RTL mode produces an RTL footnote while in LTR mode it produces an LTR footnote.

☞   \LTRfootnotetext used in conjunction with \footnotemark, will always produce an LTR footnote, independent on the current mode.

☞   \RTLfootnotetext used in conjunction with \footnotemark, will always produce an RTL footnote, independent on the current mode.

2.7.1 Footnote Rule

The behavior of footnote rules can also be controlled.

\autofootnoterule   \rightfootnoterule   \leftfootnoterule
\LRfootnoterule   \textwidthfootnoterule

☞   \autofootnoterule will draw the footnote rule right or left aligned based on the direction of the first footnote following the rule (i.e., put in the current page).

☞   \rightfootnoterule will put footnote rule on the right-hand side.

☞   \leftfootnoterule or \LRfootnoterule will put footnote rule on the left-hand side.

☞   \textwidthfootnoterule will draw the footnote rule with a width equal to \textwidth.

2.8   Two Column Typesetting

\RTLdblcol   \LTRdblcol

If you pass the twocolumn option to the class file and if the main direction of the document is RTL, then you get RTL two column and if the main direction of the document is LTR, then you get LTR two column. In addition, \RTLdblcol allows you to have RTL two column typesetting and \LTRdblcol allows you to have LTR two column typesetting as the options of the class file.

2.9   RTL cases

\rcases{\text{⟨brach1⟩}\cr\text{⟨brach2⟩}\cr\text{⟨brach3⟩}...}
\text{⟨main⟩}

\rcases is defined in bidi for typesetting RTL cases. \text is defined in amsmath package, so this means that you need to load amsmath package too.

```
1  \documentclass{article}
2  \usepackage{amsmath}
3  \usepackage{bidi}
4  \begin{document}
5  \setRTL
6  \[\rcases{\text{men}\cr\text{women}}
7  \text{Humans Beings}
8  \]
9  \end{document}
```

2.10 Typesetting Logos

```
\XeTeX    \XeLaTeX
```

bidi defines XeTeX and XeLaTeX logos and in addition, it makes sure that logos, TeX, LaTeX, LaTeX 2_ε are typeset LTR.

2.11 Separation Mark

```
\SepMark{⟨mark⟩}   \@SepMark
```

Generally in Standard LaTeX, dot is used for separation between section numbers, equation numbers any anything else which needs to be seperated. You can use \SepMark to use any other mark as the seperation mark instead a dot.

```
1  \documentclass{article}
2  \usepackage{bidi}
3  \SepMark{-}
4  \begin{document}
5  \section{First}
6  \subsection{Second}
7  \subsubsection{Third}
8  \end{document}
```

If you decide to change the numbering of chapters, sections, subsections, equations, figures and . . . , you should either load amsmath package and use \numberwithin macro to do this or do the ordinary way, but instead dot write \@SepMark. Using dot instead \@SepMark will certainly make trouble.

```
1  \documentclass{article}
2  \usepackage{bidi}
3  \SepMark{-}
4  \makeatletter
5  \renewcommand\theequation{\thesection\@SepMark\@arabic\c@equation}
6  \makeatother
7  \begin{document}
8  \section{First}
9  \begin{equation}
10 x^2+y^2=z^2
11 \end{equation}
12 \end{document}
```

2.12 \raggedright, \raggedleft **commands,** flushleft **and** flushright **Environments**

\raggedright command and flushleft environment put the text on the left hand side and \raggedleft command and flushright environment put the text on the right hand side, independent on the current mode.

2.13 Primitive-like commands

> \hboxR \hboxL \vboxR \vboxL

☞ The syntax of \hboxR is exatly the same as the syntax of \hbox, but its contents is always typeset RTL.

☞ The syntax of \hboxL is exatly the same as the syntax of \hbox, but its contents is always typeset LTR.

☞ The syntax of \vboxR is exatly the same as the syntax of \vbox, but its contents is always typeset RTL.

☞ The syntax of \vboxL is exatly the same as the syntax of \vbox, but its contents is always typeset LTR.

2.14 **LTRitems** and **RTLitems** Environments

If you typeset an itemize, or an enumerate, or a description environment where all \items are one directional, you have no problem at all as shown below:

```
1  \documentclass{article}
2  \begin{document}
3  Anyone who reads Old and Middle English literary texts will be familiar
       with the mid-brown volumes of the EETS, with the symbol of Alfred's
4  \begin{enumerate}
5  \item Anyone who reads Old and Middle English literary texts will be
       familiar with the mid-brown volumes of the EETS, with the symbol of
       Alfred's
6  \item Anyone who reads Old and Middle English literary texts will be
       familiar with the mid-brown volumes of the EETS, with the symbol of
       Alfred's
7  \end{enumerate}
8  \end{document}
```

However if the above example becomes bidirectional, as shown below:

```
1  \documentclass{article}
2  \usepackage{bidi}
3  \begin{document}
4  Anyone who reads Old and Middle English literary texts will be familiar
       with the mid-brown volumes of the EETS, with the symbol of Alfred's
5  \begin{enumerate}
6  \item Anyone who reads Old and Middle English literary texts will be
       familiar with the mid-brown volumes of the EETS, with the symbol of
       Alfred's
7  \setRTL
8  \item Anyone who reads Old and Middle English literary texts will be
       familiar with the mid-brown volumes of the EETS, with the symbol of
       Alfred's
```

```
 9   \end{enumerate}
10   \end{document}
```

Then some people may argue that this typographically does not look promising. For this purpose, RTLitems environment is provided which has the following syntax:

```
\begin{RTLitems} [length]
   \item ⟨text⟩
   ...
\end{RTLitems}
```

Where `[length]` is optional and if you do not give it, the value of `\rightskip` will be equal to the value of `\labelwidth`+`\labelsep` by default and if you give this optional length, then the value of `\rightskip` will be equal to the value of `\labelwidth`+*given length*. Thus by using the RTLitems environment, the previous example will look like the following:

```
 1   \documentclass{article}
 2   \usepackage{bidi}
 3   \begin{document}
 4   Anyone who reads Old and Middle English literary texts will be familiar
         with the mid-brown volumes of the EETS, with the symbol of Alfred's
 5   \begin{enumerate}
 6   \item Anyone who reads Old and Middle English literary texts will be
         familiar with the mid-brown volumes of the EETS, with the symbol of
         Alfred's
 7   \begin{RTLitems}
 8   \item Anyone who reads Old and Middle English literary texts will be
         familiar with the mid-brown volumes of the EETS, with the symbol of
         Alfred's
 9   \end{RTLitems}
10   \end{enumerate}
11   \end{document}
```

Similarly, LTRitems environment is defined which has the following syntax:

```
\begin{LTRitems} [length]
   \item ⟨text⟩
   ...
\end{LTRitems}
```

Where `[length]` is optional and if you do not give it, the value of `\leftskip` will be equal to the value of `\labelwidth`+`\labelsep` by default and if you give this optional length, then the value of `\leftskip` will be equal to the value of `\labelwidth`+*given length*.

2.15 \setLTRbibitems, \setRTLbibitems, and \setdefaultbibitems commands

---
\setLTRbibitems   \setRTLbibitems   \setdefaultbibitems

☞ If your whole thebibliography environment is inside RTL mode, but all your \bibitems are LTR and you actually want to have \bibname to appear on the RHS, you can use \setLTRbibitems command before thebibliography environment.

☞ If your whole thebibliography environment is inside LTR mode, but all your \bibitems are RTL and you actually want to have \bibname to appear on the LHS, you can use \setRTLbibitems command before thebibliography environment.

☞ \setdefaultbibitems is the default, when your \bibitems are a mixture of LTR and RTL and it does not matter what mode (LTR or RTL) your thebibliography environment is in. Please note that you do not have to use \setdefaultbibitems command in this case at all.

Consider an example that your thebibliography environment is inside LTR mode and you have, say two \bibitems. The first \bibitem is LTR and the second \bibitem is RTL. One could typeset this senario as shown below:

```
1  \documentclass{article}
2  \usepackage{bidi}
3  \begin{document}
4  \begin{thebibliography}{99}
5  \bibitem This is the first bibitem which is LTR.
6  \begin{RTLitems}
7  \bibitem This is the second bibitem which is RTL.
8  \end{RTLitems}
9  \end{thebibliography}
10 \end{document}
```

2.16 Typesetting margin par

By default, in RTL mode, \marginpar appears on LHS and its content is typeset RTL and in LTR mode, \marginpar appears on RHS and its content is typeset LTR. In addition, the three following commands are provided:

\setRTLmarginpar   \setLTRmarginpar   \setdefaultmarginpar

☞ \setRTLmarginpar always makes \marginpar to appear on LHS and the content of \marginpar is typeset RTL (this is independent of the current mode).

☞ \setLTRmarginpar always makes \marginpar to appear on RHS and the content of \marginpar is typeset LTR (this is independent of the current mode).

☞ \setdefaultmarginpar gives the default behaviour of \marginpar as described above.

2.17 Typesetting of Headers and Footers

If the main direction of the document is RTL, then headers and footers are typeset RTL and if the main direction of the document is LTR, then headers and footers are typeset LTR.

2.18 Tabular Typesetting

In RTL mode, tabular are typeset RTL and in LTR mode, tabular are typeset LTR.

2.19 Equation Numbers

For `reqno`, equation numbers are on the right hand side and for `leqno`, equation numbers are on the left hand side, independent on the current mode.

3 Support For Various Packages and Classes

The bidi package supports amsmath, amsthm, array, arydshln, breqn, caption, color, colortbl, draftwatermark, fancyhdr, flowfram, graphicx, hyperref, listings, minitoc, multicol, pdfpages, pstricks, ragged2e, stabular, subfigure, supertabular, xtab, tabls, tabulary, PGF & TIKZ, tocbibind, tocloft, tocstyle, wrapfig, xcolor, xltxtra packages, amsart, amsbook, artikel1, artikel2, artikel3, extarticle, standrad article, boek, boek3, standard book, bookest, extbook, extletter, scrlettr,standard letter, memoir, extreport, rapport1, rapport3, refrep, standard report, scartcl, scrbook, scrreprt classes and any other packages and classes that relies on these packages and classes. This means, you can use all these packages and classes in addition to other packages and classes that rely on these packages and classes and use their functionality fully for your bidirectional documents.

We now give some details that you should know about the supported packages or classes.

3.1 Color

You can use color and xcolor packages to typeset texts in colours and colour boxes produced by `\colorbox` and `\fcolorbox` commands. Please note that your Coloured text should not span more than a line, if your text spans more than a line, you will be in trouble which means your whole document, page or paragraph may be coloured. If your texts spans more than a line, then you should use xecolour package.

Also if you are going to use `\color` command to colour the text at the beginning of a paragraph, then you should have `\leavevmode` before `\color` command.

For having coloured tabular, you can use colortbl package.

3.2 Hyperref

The hyperref package works fine with bidirectional documents if and only if, your link will not span more than a line. If your link spans more than a line, then your whole document, or page or paragraph may be linked.

3.3 flowfram Package

You can use flowfram package for your bidirectional documents. Please note that flowfram package provides support for bidirectional column typesetting, for details, see its manual.

3.4 Multicolumn Typesetting

In the previous versions of bidi package, it was recommended that you need to use fmultico package instead the original multicol package for RTL multicolumn typesetting. This is not the case any more and you should not use buggy fmultico package any more. Simply load the original multicol package before loading bidi. bidi now supports multicol package and you can typeset bidirectional multi columns.

In addition, you also can use vwcol package for variable width bidirectional column typesetting.

4 Extra bidi Packages and Classes

4.1 The Issue of Footnote

In standard LaTeX you can not use footnotes inside `\chapter`, `\part`, `\section`, `\subsection`, `\subsection` and any other section-like commands, `\caption` and tabular environment.

bidi package provides bidiftnxtra package that solves the issue of footnote in standard LaTeX. bidiftnxtra package should be loaded after bidi package.

4.2 Typesetting Poems

The bidi package provides bidipoem package for typesetting Persian poems. It provides four environments, `traditionalpoem`, `modernpoem` and starred version of these. In the starred version of these environments you do not need to type `\\` and that is the only difference with the normal version of the environments. The `traditionalpoem` environment and its starred version are also useful for typesetting Classic Arabic poetry, in fact this package may also be useful for other RTL languages.

When using bidipoem package, at least you need to run `xelatex` twice on your document. In fact, if you run `xelatex` just once on your document, you get a message saying "Unjustified poem. Rerun `XeLaTeX` to get poem right".

When you typeset your poems, you might get underfull `\hbox` messages. This is absolutely normal and if you want to get rid of these underfull `\hbox` messages, then you would need to use Kashida.

If you need to change the default distance between two verses, you can do just that by:

```
\renewcommand\poemcolsepskip{⟨length⟩}
```

```
\begin{traditionalpoem}
⟨verse1⟩&⟨verse2⟩\\
⟨verse3⟩&⟨verse4⟩\\
...
\end{traditionalpoem}
```

```
\begin{traditionalpoem*}
⟨verse1⟩&⟨verse2⟩
⟨verse3⟩&⟨verse4⟩
...
\end{traditionalpoem*}
```

4.3 Typesetting Resumé

The bidi package provides bidimoderncv[2] class for typesetting resumés. There are
two examples, namely `test-casualcv.tex` and `test-classiccv.tex`, in the doc
folder than you can look and learn how you can use it.

4.4 Print Two Pages On A Single Page

bidi package provides bidi2in1 package for printing two pages on a single (landscape)
A4 page. Page numbers appear on the included pages, and not on the landscape
'container' page.

4.5 Producing Presentations

At the moment, there is only one class that you can prepare your presentations
with.

4.5.1 bidipresentation Class

bidipresentation is a simple class for presentations to be shown on screen or beamer.
It is derived from LATEX's article class. The virtual paper size of documents pro-
duced by this class: width=128mm, height=96mm. bidipresentation requires that
the fancyhdr and geometry packages are available on the system. Enhancements to
the bidipresentation class are easily made available by other packages, these include
slides with a background from a bitmap (eso-pic package).

Usage: The class is used with

```
\documentclass [Options] {bidipresentation}
```

Options of the article class are also available to bidipresentation, e. g. 10pt, 11pt,
12pt for selection of font size. However, not all options of the article class will be
appropriate for a presentation class, e. g. twocolumn.

———

2. This class is the modified version of moderncv class.

A simple example document:

```
1   \documentclass[12pt]{bidipresentation}
2   \usepackage{eso-pic}
3   \usepackage[RTLdocument]{bidi}
4   \pagestyle{pres}
5   \AddToShipoutPicture{
6   \includegraphics{gradient2.png}
7   }
8   \begin{document}
9   \begin{titlepage}
10  \centering
11     \distance{1}
12     {
13  \Huge \bfseries Title of the presentation \par
14  }
15   \vspace{1.3ex} \large
16   Author\\[2ex]Institution
17   \distance{2}
18   \end{titlepage}
19   \begin{plainslide}[Title of Page]
20  The first page
21   \end{plainslide}
22   \begin{rawslide}
23  The second page
24   \end{rawslide}
25   \end{document}
```

The title page can be created within the `titlepage` environment, the `\maketitle` command is not available. Slides may be created with the `plainslide` environment, you may add the title of the slide with the optional parameter. The contents of the slide are centered vertically. Another environment generating a slide is `rawslide`: slides are written without title, contents are not vertically centered.

The `\distance{⟨number⟩}` command allows to introduce vertical space into slides constructed with the `rawslide` and `titlepage` environments. You should use pairs of `\distance{}` commands with numbers indicating the relative height of empty space, see the titlepage in the example above.

Pictures can be included with the `\includegraphics` command of the graphicx package. Please be aware that the dimensions of the pages are 128mm × 96mm and therefore included graphics are scaled appropriately.

Enhancements to bidipresentation:

Fill background of a presentation with bitmaps: eso-pic package allows you to paint the background with a picture:

```
1   \usepackage{eso-pic}
2   ...
3   \AddToShipoutPicture{
4   \includegraphics{gradient2.png}
5   }
```

`\AddToShipoutPicture{}` puts the picture on every page, `\AddToShipoutPicture*{}` puts it on to the current page, `\ClearShipoutPicture` clears the background beginning with the current page. Details of eso-pics commands can be found in its own documentation.

5 Some Useful Internal Macros

There are some useful internal macros that might be helpful for you. This section, explains all these useful internals.

5.1 RTL Conditional

`\if@RTL`

`\if@RTL` conditional is true inside RTL mode and it is false in LTR mode.

5.2 Main RTL Conditional

`\if@RTLmain`

If the main direction of the document is RTL, `\if@RTLmain` is true and if the main direction of the document is LTR, `\if@RTLmain` is false.

5.3 Latin Conditional

`\if@Latin`

`\if@Latin` inside any environment that uses Latin font is true and inside any environment that uses RTL font is false.

5.4 Tags Internal Macro

`\@iftagsloaded{⟨tags name⟩}{⟨do thing(s) if the tag is loaded⟩}`
`{⟨do thing(s) if the tag is not loaded⟩}`

As you can see, the syntax of `\@iftagsloaded` is exactly the same as the syntax of `\@ifpackageloaded` and `\@ifclassloaded`. By tags, we mean things like leqno or reqno. Please note that in the argument ⟨tags name⟩, the extension clo should not be given.

5.5 Definition File Loaded Internal Macro

`\@ifdefinitionfileloaded{⟨definition file name⟩}`
`{⟨do thing(s) if the definition file is loaded⟩}`
`{⟨do thing(s) if the definition file is not loaded⟩}`

As you can see, the syntax of `\@ifdefinitionfileloaded` is exactly the same as the syntax of `\@ifpackageloaded` and `\@ifclassloaded`. By definition file, we mean things like hyperref-bidi.def or wrapfig-bidi.def. Please note that in the argument ⟨definition file name⟩, the extension def should not be given.

5.6 Tabular Conditional

`\if@RTLtab`

If the tabular is typeset RTL, `\if@RTLtab` is true and if the tabular is typeset LTR, `\if@RTLtab` is false.

5.7 Footnote Conditional

`\if@RTL@footnote`

When footnotes are typeset RTL, `\if@RTL@footnote` is true and when footnotes are typeset LTR, `\if@RTL@footnote` is false.

5.8 Direction Ensuring Macros

`\@ensure@RTL{⟨text⟩}` `\@ensure@RL{⟨text⟩}` `\@ensure@LTR{⟨text⟩}`
`\@ensure@LR{⟨text⟩}` `\@ensure@dir{⟨text⟩}` `\@ensure@maindir{⟨text⟩}`

☞ `\@ensure@RTL` and `\@ensure@RL` internals make sure that ⟨text⟩ is always typeset RTL, independent on the current mode.

☞ `\@ensure@LTR` and `\@ensure@LR` internals make sure that ⟨text⟩ is always typeset LTR, independent on the current mode.

☞ `\@ensure@dir` and `\@ensure@maindir` if used in RTL mode, they put ⟨text⟩ inside `\RLE` and if used in LTR mode, they put the text as it is.

5.9 Reset Direction Macro

`\save@dir` `\saved@@dir` `\reset@dir`

☞ `\save@dir`, if the direction of typesetting is RTL, defines `\saved@@dir` to be RTL and if the direction of typesetting is LTR, defines `\saved@@dir` to be LTR.

☞ `\reset@dir`, if `\saved@@dir` is defined as RTL, inserts `\setRTL` otherwise, if `\saved@@dir` is defined as LTR, inserts `\setLTR`, otherwise does nothing.