luabidi
bidirectional typesetting in LuaTeX

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1   Objectives

Luabidi is an attempt to provide bidirectional writing support for the LuaTeX engine in the same vein as the bidi package[1] enables bidirectional writing with XeTeX. The most prominent user of this package is polyglossia[2] which uses luabidi with RTL languages and LuaTeX output (as opposed to bidi with XeTeX). Note, however, that luabidi is much more limited than bidi. Currently, only a very basic subset of the latter's features is supported.

2   Package Options

arabmaths By default, luabidi generates left-to-right maths. If you would like to have right-to-left maths, use this option.

textwidthfootnoterule expands the footnote to the whole text width.

3   User Commands

3.1   Main Text Direction

By default, the main directionality of the document is left-to-right. To change it to right-to-left, use the switch

```
\setRTLmain
```

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*Current maintainer. Please submit bug reports and feature requests to `https://github.com/bidi-tex/luabidi/issues`.

[1]See `https://ctan.org/pkg/bidi`.

[2]See `https://ctan.org/pkg/polyglossia`.

3.2 Paragraph Text Direction

To change directionality for paragraphs, you can use the following switches:

\setRTL (alias: \setRL, \unsetLTR) Change paragraph directionality to right-to-left.

\setLTR (alias: \setLR, \unsetRTL) Change paragraph directionality to left-to-right.

Alternatively, you can also use the environments

```
\begin{RTL}
...
\end{RTL}
```

or

```
\begin{LTR}
...
\end{LTR}
```

3.3 Footnotes

Luabidi provides an additional footnote command, \Footnote, in addition to the standard \footnote command. The standard \footnote command thereby places the footnote always on the side that is currently the origin of direction: on the left side of the page in LTR paragraphs and on the right in LTR paragraphs.

The uppercased \Footnote command, in contrast, always places the footnote on the left side, notwithstanding the current directionality. As opposed to \footnote, \Footnote does not have an optional argument to customize the number.

Consequently,

- you should use \Footnote if you want to have footnotes placed at the left in any case

- and \footnote to get right-aligned footnotes in RTL context.

- At the moment, there is no command provided to set right-aligned footnotes in LTR paragraphs. This might be added in later releases.

The placement of the footnote rule depends on the main text directionality:

- In the default mode (i. e., if \setRTLmain is not used), the footnote rule is always set left-aligned (as usual in LTR documents).

- If the main direction is RTL (i. e., if \setRTLmain is used), the footnote rule is always set right-aligned (as usual in LTR documents)

4 Commands for Package Authors

The following tests are provided to be used in packages:

\if@RTL determines whether the current paragraph direction is right-to-left.

\if@RTLmain determines whether the main direction is right-to-left.

The following macros are provided

\@ensure@RTL{...} Ensure that the argument is typeset RTL.

\@ensure@LTR{...} Ensure that the argument is typeset LTR.

\@ensure@dir{...} (alias: \@ensure@maindir{...}) If used in RTL mode, the argument is put inside \RLE, if used in LTR mode, the argument is output as is.

5 Revision Log

v. 0.4 (2019/08/24) Fix \@ensure@RTL.

v. 0.3 (2019/07/10) Fix compatibility with recent LuaTEX (this version was never released to CTAN).

v. 0.2 (2013/05/27) Fix additional files.

v. 0.1 (2009/04/01) Initial release.