The beamer-rl class

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Repository:  https://github.com/seloumi/beamer-rl
Bug tracker: https://github.com/seloumi/beamer-rl/issues

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Creating beamer presentation for languages with script from right to left (like arabic) using pdf\LaTeX\ or X\LaTeX\ still poses many problems due to bugs not currently resolved especially for colors.

The Lua\TeX\ team set solutions for these issues thanks to them and to Javier Bezos for his works on the package babel and bidi writing

This class provides patches of some beamer templates and commands to create right to left beamer presentation, the class call babel with bidi=basic option and require Lua\TeX\ engine
\documentclass{beamer-rl}

% import language
\babelprovide[import=ar-DZ, main]{arabic}

\usetheme{Madrid}

\begin{document}
...
\end{document}

We get a similar result by adding the main language of the presentation (language with right-to-left script) as option of class as follows:
How to use beamer-rl II

\documentclass[arabic]{beamer-rl}

\usetheme{CambridgeUS}

\begin{document}
...
\end{document}

We can also add more language options that the command \texttt{\textbackslash babelprovide} provides as follows:

\documentclass[arabic={mapdigits}]{beamer-rl}

\% equivalent to
\% \texttt{\textbackslash babelprovide[import,main,mapdigits]{arabic}}
The class define in the same way as options (languages supported by the package \texttt{babel} with script from right to left)

\begin{verbatim}
arabic   arabic-ps   pashto
arabic-dz arabic-jo persian
arabic-tn centralkurdish punjabi-arab
arabic-ma hebrew syriac
arabic-eg kashmiri urdu
arabic-sa mazanderani uyghur
arabic-iq malayalam uzbek-arab
arabic-sy northernkurdish-ar
arabic-lb arab yiddish
\end{verbatim}
Some notes I

- The class define Amiri as default sans serif font, we can modify this in the preamble with
  \babelfont{sf}{<font name>}

- The class defines option layout which passes its content to babel
  \documentclass[layout={<babel layout>}]{beamer-rl}

More on the subject can be found in the manual of babel package

- The beamer-rl class swap the definition of \blacktriangleright with \blacktriangleleft in RTL context

<table>
<thead>
<tr>
<th></th>
<th>\blacktriangleright</th>
<th>\blacktriangleleft</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTR context</td>
<td>▶</td>
<td>◀</td>
</tr>
<tr>
<td>RTL context</td>
<td>▶</td>
<td>◀</td>
</tr>
</tbody>
</table>
In some cases you need to use \babelsublr command from bebel package to insert a left to right text within your right to left text, e.g. if you need to insert a pspicture drawing in RTL context

\bebelsublr{LTR context ... }
pgfpages-rl package

pgfpages-rl adds to pgfpages the ability to support TRT pagedir, the package requires LuaLaTEX engine. It can also be used with other document classes besides beamer-rl

\documentclass{beamer-rl}
\babelprovide[import=ar-DZ, main]{arabic}
\usetheme{Warsaw}
\usepackage{pgfpages-rl} % adapt pgfpages to TRT pagedir
\setbeamertemplate{note page}[]
\setbeameroption{show notes on second screen=right}
\begin{document}
...
\end{document}
Examples
On 21 April 1820, during a lecture, Ørsted noticed a compass needle deflected from magnetic north when an electric current from a battery was switched on and off.
\setbeamertemplate{enumerate item}[ball]
\begin{enumerate}
\item First
\item Second
\end{enumerate}

% in RTL context
\setbeamertemplate{itemize item}[triangle]
\begin{itemize}
\item First
\item Second
\end{itemize}
First
Second

% in LTR context
\setbeamertemplate{itemize item}[triangle]
\begin{itemize}
\item First
\item Second
\end{itemize}
\hyperlink{jumptofirst}{}
{\beamergotobutton{return to first slide}}
\hypertarget<1>{jumptofirst}{}
Theorem

There is no largest prime number.

Suppose \( p \) were the largest prime number. Let \( q \) be the product of the first \( p \) numbers.

Then \( q + 1 \) is not divisible by any of them, thus divisible by some prime number not in the first \( p \) numbers.
Theorem

There is no largest prime number.

Proof

1. Suppose $p$ were the largest prime number.
2. Let $q$ be the product of the first $p$ numbers.
3. Then $q + 1$ is not divisible by any of them.
4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first $p$ numbers.

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Theorems

The proof uses *reductio ad absurdum*.

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4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first $p$ numbers.
Theorem: There is no largest prime number.

Proof:

1. Suppose $p$ were the largest prime number.
2. Let $q$ be the product of the first $p$ numbers.
3. Then $q + 1$ is not divisible by any of them.
4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first $p$ numbers.

Thus divisible by some prime number not in, 1 is greater than $q + 1$ but numbers $p$ the first.
\framezoom<1><2>[border=2](1cm,1cm)(2cm,2cm)

% (1cm,1cm)=((<upper right x>,<upper right y>))
% (2cm,2cm)=((<zoom area width>,<zoom area depth>))
\pgfimage[height=5cm]{example-image}