

examples

Sašo Živanović*

May 3, 2020

Abstract

Yet another package for typesetting linguistic examples.

This package is work in progress. Anything may change without prior notice.

1 Desiderata

- ✓ Introduce examples by `\item`.
- ✓ Use the same environment all levels of examples, and also in footnotes — moving an example around should not require changing the environment.
- ✓ Base the package on the `enumitem` package.
- ✓ Users can define their own example environments. Environments can share the counter.
- ✓ Inline examples, which can share the counter with displayed examples.
- Manual examples.

*e-mail: saso.zivanovic@guest.arnes.si; web: <http://spj.ff.uni-lj.si/zivanovic/>

2 Examples of examples

```
\begin{examples}
\item Featuring:
  \begin{examples}
    \item individuals:
      \begin{examples*}
        \item farmers
        \item donkeys
      \end{examples*}
    \item events:
      \begin{examples*}
        \item owning
        \item beating
      \end{examples*}
  \end{examples}
\item Every farmer who owns a donkey beats it.
  \begin{examples}
    \item For every pair of a farmer  $x$  and a donkey  $y$ ,  $x$  beats  $y$ .
    \item For every farmer  $x$  who owns a donkey, there is a donkey  $y$  such
      that  $x$  beats  $y$ .
  \end{examples}
\end{examples}
A bit of text.
\begin{examples*}[itemjoin=\space]
\item And
\item some
\item more,
\item very
\item short
\item inline
\item examples
\end{examples*}.
```

-
- (1) Featuring:
- individuals: i. farmers, ii. donkeys
 - events: i. owning, ii. beating
- (2) Every farmer who owns a donkey beats it.
- For every pair of a farmer x and a donkey y , x beats y .
 - For every farmer x who owns a donkey, there is a donkey y such that x beats y .
- A bit of text. (3) And (4) some (5) more, (6) very (7) short (8) inline (9) examples.

Examples can be produced in footnotes using the same code, like this.¹ But footnote examples don't yet work in the `tcblisting` environment used to produce the lovely boxes — footnote ?? containing example (i) was typeset by this code:²

```

Examples can be produced in footnotes using the same code, like
this.\footnote{\label{fn:apology}Sorry, donkeys, I know you would prefer to be
fed, as in
\ref{ex:donkey:feed}.
\begin{examples}
\item\label{ex:donkey:feed} Every farmer who owns a donkey feeds it.
\end{examples}
}

```

And now some for some math examples. The `mathexamples` environment is defined to share a counter with `examples`, so the example numbers continue. Note there's no dollar signs around them, courtesy of `\fancyitem`.

```

\newexamples{mathexamples}{examples}{4}{} % in the preamble
\newcommand\MathItem{\AtEndItem{$}\PlainItem$}
\FancyItem{mathexamples}{\MathItem}
\begin{mathexamples} % in the document
\item \forall x\forall y\colon (Fx\wedge Dy\wedge Oxy)\Rightarrow Bxy
\item \forall x\colon (Fx\wedge \exists y\colon Dy\wedge Oxy)\Rightarrow
\exists y\colon Dy\wedge Bxy
\end{mathexamples}

```

(13) $\forall x\forall y: (Fx \wedge Dy \wedge Oxy) \Rightarrow Bxy$

(14) $\forall x: (Fx \wedge \exists y: Dy \wedge Oxy) \Rightarrow \exists y: Dy \wedge Bxy$

¹Sorry, donkeys, I know you would prefer to be fed, as in (i).
(i) Every farmer who owns a donkey feeds it.

²There's further footnote-related stuff that doesn't work properly. (10) There's too much space above this footnote. (11) The reference to footnotes doesn't work. (12) The examples you are reading right now should be numbered by roman numerals, and not interfere with the numbering in the text.