

The `semantic-markup` Package for Meaningful Markup

Andrew A. Cashner*

October 28, 2016

The `semantic-markup` package provides a set of simple commands to allow for semantic markup. The commands are inspired by the XML elements of the Text Encoding Initiative (<http://www.tei-c.org>). They are intended especially for scholarly writing in the humanities, including about music. The goal is simply to allow scholars to write with attention to meaning and content rather than to formatting.

Contents

1	Package Options	1
1.1	<code>defaultquotes</code>	1
1.2	<code>endnotes</code>	1
2	Semantic Commands Defined Without Arguments	1
3	Semantic Commands With Arguments	2
4	Footnote Environment	3
5	Musical Symbols	3
6	Code	4

1 Package Options

1.1 `defaultquotes`

The package configures `csquotes` to place end punctuation inside quotation marks, according to United States usage. Use the `defaultquotes` package option to restore the default behavior of `csquotes`.

*andrewacashner@gmail.com

1.2 endnotes

The `endnotes` option converts footnotes to endnotes, including footnotes created with this package's `Footnote` environment.

2 Semantic Commands Defined Without Arguments

The following commands are defined (using `xparse`) as aliases to standard L^AT_EX commands or `\textquote` from the `csquotes` package. In other words, they are not defined with an argument. For example, the command for a technical term, typically set in italics is defined this way:

```
\NewDocumentCommand{\term}{}{\emph}
```

To redefine it to be set in bold, for example, you can use the basic L^AT_EX command `\renewcommand{\term}{\textbf}`.

Package Command	Alias	Use
<code>\quoted</code>	<code>\textquote</code>	Quoted material, taking care of end punctuation: instead of "word," write <code>\quoted {word}</code> ,
<code>\soCalled</code>	<code>\textquote</code>	Scare quotes
<code>\strong</code>	<code>\textbf</code>	Highlight emphasis just as in HTML
<code>\code</code>	<code>\texttt</code>	Computer code in teletype font (not verbatim)
<code>\term</code>	<code>\emph</code>	Technical terms, set in italics
<code>\mentioned</code>	<code>\emph</code>	Referring to a word as a word rather than to its meaning, as in philological discussion
<code>\foreign</code>	<code>\emph</code>	Foreign term
<code>\worktitle</code>	<code>\emph</code>	Title of a complete work (of literature, art, music), set in italics; use for books, journal titles
<code>\parttitle</code>	<code>\textquote</code>	Title of a portion of a work, set in quotation marks, such as a journal article, song on an album

3 Semantic Commands With Arguments

These commands have slightly more complex definitions, but can still be easily redefined. See the `xparse` documentation on the syntax of these commands.

Command	Definition	Usage
<code>\add</code>	One argument: Put square brackets around argument	For editorial additions
<code>\Dots</code>	Put ellipsis in square brackets	For editorial omissions from quotations
<code>\gloss</code>	Two arguments: Put first in italics and second in parentheses	Use a technical or foreign term and give its definition
<code>\quotedgloss</code>	Two arguments: Put first in quotation marks and second in parentheses	Same as <code>\gloss</code> but using <code>\quoted</code> for the first argument instead of <code>\mentioned</code>
<code>\XXX</code>	One optional argument with default value of <code>\add {FIX}</code>	Identify problem spot in draft
<code>\citXXX</code>	One optional argument	Make footnote indicating a missing citation; optional argument may be used for reminder of the citation name or description

4 Footnote Environment

When writing many long footnotes it can be useful to have an environment for footnotes. Here one is defined using the `environ` package. You still have to escape the end of the line before the footnote begins. Use like so:

```

Body text.%
  \begin{Footnote}
    Footnote text.
    More footnote text.
  \end{Footnote}
Continuation of body text.
```

5 Musical Symbols

Shorthands are defined for musical accidentals, using L^AT_EX math-mode symbols. These could be redefined to use Unicode symbols if the font contains them, or with commands from the `lilyglyphs` package. Remember that like all commands without arguments, L^AT_EX will ignore the space after the command-name, so you will need to write `\f1{}` or `\f1\` . There is also a command for octave numbers, for the system in which middle C begins the fourth octave.

Command	Alias
<code>\fl</code>	<code>\$\flat\$</code>
<code>\na</code>	<code>\$\natural\$</code>
<code>\sh</code>	<code>\$\sharp\$</code>
<code>\octave</code>	<code>\textsubscript</code>

For stacked numerals, as in meter signatures or figured bass, we provide two simple options, `\musfig` using `\genfrac` from `amsmath`, and `\meter`, which uses `\Takt` from the `harmony` package, which spaces the numerals more closely. Both commands take two arguments, one for the top numeral and the second for the bottom numeral. You could write, for example:

There is a `\musfig{6--5}{4--3}` cadential pattern
before the shift to `\meter{3}{4}` time.
The melody begins on `F\sh\octave{4}`.

There is a $\frac{6-5}{4-3}$ cadential pattern before the shift to $\frac{3}{4}$ time. The melody begins on $F\sharp_4$.

For more complex notation, such as three-level numerals, or stacked figured-bass symbols with accidentals or slashes, you will have to devise your own solution.

6 Code

```
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{semantic-markup}[2016/10/28
  Macros for TEI-like semantic markup]
% Copyright 2016 Andrew A. Cashner, andrewacashner@gmail.com

% This work may be distributed and/or modified under the
% conditions of the LaTeX Project Public License, either
% version 1.3 of this license or (at your option) any
% later version.
% The latest version of this license is in
%   http://www.latex-project.org/lppl.txt
% and version 1.3 or later is part of all distributions
% of LaTeX version 2005/12/01 or later.
%
% This work has the LPPL maintenance status ‘maintained’.
% The Current Maintainer of this work is Andrew A. Cashner.
% This work consists of the package file semantic-markup.sty
% and the documentation file semantic-markup.tex.
```

```

% CHANGE LOG
% 2016-09-22 'endnotes' option added
% 2016-09-01 First version on CTAN

% Option to use csquotes default behavior instead of the
% US localized punctuation used in this package
\newif\ifdefaultquotes
\defaultquotesfalse
\DeclareOption{defaultquotes}{\defaultquotestruer}

% Option to convert footnotes to endnotes, include
% Footnote environment
\newif\ifendnotes
\endnotesfalse
\DeclareOption{endnotes}{\endnotestruer}

\ProcessOptions\relax
%*****

\RequirePackage{xparse}

\RequirePackage{csquotes}
\ifdefaultquotes\else
  % Put end punctuation inside quotation marks
  % for the specified marks
  \renewcommand{\mktextquote}[6]{\#1\#2\#4\#5\#3\#6}
  \DeclareAutoPunct{.,!}?
\fi

\NewDocumentCommand{\quoted}{-}{
  {\textquote}
}
\NewDocumentCommand{\soCalled}{-}{
  {\textquote}
}
\NewDocumentCommand{\strong}{-}{
  {\textbf}
}
\NewDocumentCommand{\code}{-}{
  {\texttt}
}
\NewDocumentCommand{\term}{-}{
  {\emph}
}
\NewDocumentCommand{\mentioned}{-}{
  {\emph}
}
\NewDocumentCommand{\foreign}{-}{
  {\emph}
}
\NewDocumentCommand{\worktitle}{-}{
  {\emph}
}
\NewDocumentCommand{\parttitle}{-}{

```

```

{\textquote}

% editorial addition
\NewDocumentCommand{\add}{ m }
{[#1]}
% editorial ellipsis
\NewDocumentCommand{\Dots}{}{\add{\dots}}
% explanatory gloss of technical or foreign term
\NewDocumentCommand{\gloss}{ m m }{%
  \mentioned{#1} (#2)%
}
% explanatory gloss of word in quotation marks
\NewDocumentCommand{\quotedgloss}{ m m }{%
  \quoted{#1} (#2)%
}

%*****
% Identify problem spot in draft
\NewDocumentCommand{\XXX}{ O{\add{FIX}} }{%
  \textbf{#1}%
}
% Indicate citation to be filled in later
% Optional argument for indicating the source
\NewDocumentCommand{\citXXX}{ o }{%
  \footnote{\textbf{[Citation needed]\IfValueTF{#1}{#1}{}}}%
}

%*****
% Footnote as environment
\RequirePackage{environ}
\NewEnviron{Footnote}{\footnote{\BODY}}[]

%*****
% Endnotes, if desired
% Footnote environment adjusted to fix expansion problem
\ifendnotes
  \RequirePackage{endnotes}
  \RenewEnviron{Footnote}{\expandafter\footnote\expandafter{\BODY}}[]
  \let\footnote=\endnote
  \AtEndDocument{\theendnotes}
\fi

%*****
% MUSIC SYMBOLS

% Accidentals using LaTeX symbols

```

```

\NewDocumentCommand{\fl}{-}{\flat$}
\NewDocumentCommand{\na}{-}{\natural$}
\NewDocumentCommand{\sh}{-}{\sharp$}

% Octave subscripts
\NewDocumentCommand{\octave}{-}{\textsubscript}

% Music figures
\RequirePackage{amsmath}
\NewDocumentCommand{\musfig}{- m m }{%
  $\genfrac{}{}{0pt}{1}{\text{\#1}}{\text{\#2}}$%
}

% Meter signatures
\RequirePackage[rm]{harmony}
\NewDocumentCommand{\meter}{- m m }{\Takt{\#1}{\#2}}

\endinput

```