The `semantic-markup` Package for Meaningful Markup

Andrew A. Cashner[*]

January 29, 2020

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 `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`.

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[*] `andrewacashner@gmail.com`

1.2 `endnotes`

The `endnotes` option converts footnotes to endnotes, including footnotes created with this package's `Footnote` environment. On its own, this option loads the `endnotes` package and does everything necessary for endnotes. You can define the following commands to adjust the behavior:

Command	Default value
`\DoBeforeEndnotes`	`\clearpage`
`\EndnoteFont`	Empty (normal font)

If you want to setup the endnotes in a completely different way or avoid conflicts with another package, you can do `\renewcommand{\SetupEndnotes}{}` to eliminate all of this or you can renew the command to do something else.

2 Semantic Commands Defined Without Arguments

The following commands are defined (using `xparse`) as aliases to standard LaTeX 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 LaTeX command `\renewcommand{\term}{\textbf}`.

The `\strong` command is already defined in the `fontspec` package; if that package is loaded, this package will not redefine its command.

Package Command	Alias	Use
`\quoted`	`\textquote`	Quoted material, taking care of end punctuation: instead of `"word,"` write `\quoted {word},`
`\soCalled`	`\textquote`	Scare quotes
`\strong`	`\textbf`	Highlight emphasis just as in HTML
`\code`	`\texttt`	Computer code in teletype font (not verbatim)
`\term`	`\emph`	Technical terms, set in italics
`\mentioned`	`\emph`	Referring to a word as a word rather than to its meaning, as in philological discussion
`\foreign`	`\emph`	Foreign term
`\worktitle`	`\emph`	Title of a complete work (of literature, art, music), set in italics; use for books, journal titles
`\parttitle`	`\textquote`	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
`\add`	One argument: Put square brackets around argument	For editorial additions
`\Dots`	Put ellipsis in square brackets	For editorial omissions from quotations
`\gloss`	Two arguments: Put first in italics and second in parentheses	Use a technical or foreign term and give its definition
`\quotedgloss`	Two arguments: Put first in quotation marks and second in parentheses	Same as `\gloss` but using `\quoted` for the first argument instead of `\mentioned`
`\XXX`	One optional argument with default value of `\add {FIX}`	Identify problem spot in draft
`\citXXX`	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 LaTeX 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, LaTeX will ignore the space after the command-name, so you will need to write `\fl{}` or `\fl\ `. There is also a command for octave numbers, for the system in which middle C begins the fourth octave.

If the `musicography` package is loaded, it will redefine the commands `\fl`, `\sh`, and `\na` to use nicer symbols from the MusiXTeX fonts.

Command	Alias
`\fl`	`$\flat$`
`\na`	`$\natural$`
`\sh`	`$\sharp$`
`\octave`	`\textsubscript`

For stacked numerals, as in meter signatures or figured bass, we provide two simple options, `\musfig` using `\Shortstack` from `stackengine`, and `\meter`, which is an alias for the same thing. 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 $\overset{6\text{–}5}{4\text{–}3}$ cadential pattern before the shift to $\overset{3}{4}$ 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}[2020/01/29
  Macros for TEI-like semantic markup]
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% conditions of the LaTeX Project Public License, either
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% 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
% 2020-01-29 - \musfig uses stackengine now instead of amsmath
% 2018-09-07 - ! and ? removed from autopunct for csquotes
% 2018-05-21 - Use fontspec’s definition of ‘\strong‘ if it is loaded
%            - Use musicography’s definition of ‘\fl‘, ‘\sh‘, ‘\na‘ commands if
%              it is loaded
%            - ‘\wtitle‘ and ‘\ptitle‘ shorthands added
%            - Customizable commands added for endnotes option
%
% 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}{\defaultquotestrue}

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

\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

% NB: fontspec defines its own \strong command, so only define this if fontspec
% not loaded
\@ifpackageloaded{fontspec}{}{%
    \NewDocumentCommand{\strong}{}
    {\textbf}
}


\NewDocumentCommand{\quoted}{}
{\textquote}
\NewDocumentCommand{\soCalled}{}
{\textquote}

\NewDocumentCommand{\code}{}
{\texttt}
\NewDocumentCommand{\term}{}
{\emph}
\NewDocumentCommand{\mentioned}{}
{\emph}
\NewDocumentCommand{\foreign}{}
{\emph}

\NewDocumentCommand{\worktitle}{}
{\emph}
\NewDocumentCommand{\parttitle}{}
{\textquote}

% Shorter versions of these frequently used commands
\NewDocumentCommand{\wtitle}{}{\worktitle}
\NewDocumentCommand{\ptitle}{}{\parttitle}

% 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{FIX} }{%
    \strong{\add{#1}}%
}
% Indicate citation to be filled in later
% Optional argument for indicating the source
\NewDocumentCommand{\citXXX}{ o }{%
    \footnote{\strong{\add{Citation needed\IfValueTF{#1}{: #1}{}}}}%
}

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

%******************
% Endnotes, if desired

\ifendnotes
    \RequirePackage{endnotes}

    % Customize these commands with \renewcommand
    \NewDocumentCommand{\DoBeforeEndnotes}{}{\clearpage}
    \NewDocumentCommand{\EndnoteFont}{}{}

    % Optionally remove this (\renewcommand{\MakeEndnotes}{})
    % to avoid conflicts with endnotes or other packages
    \NewDocumentCommand{\SetupEndnotes}{}{%
      \let\footnote=\endnote
      \AtEndDocument{\DoBeforeEndnotes{\EndnoteFont\theendnotes}}%
    }

    \AtBeginDocument{%
        \SetupEndnotes{}%
        % Footnote environment adjusted to fix expansion problem
        \RenewEnviron{Footnote}{\expandafter\footnote\expandafter{\BODY}}[]%
    }%
\fi
%******************

%****************************************
% MUSIC SYMBOLS

% Accidentals using LaTeX symbols
% Use better definitions from musicography if it was loaded first
\@ifpackageloaded{musicography}{}{%
    \NewDocumentCommand{\fl}{}{$\flat$}
    \NewDocumentCommand{\na}{}{$\natural$}
    \NewDocumentCommand{\sh}{}{$\sharp$}
}

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

% Music figures
\RequirePackage{stackengine}
\setstackgap{S}{2pt}
\NewDocumentCommand{\musfig}{ m m }{%
    \Shortstack{#1 #2}%
}

% Meter signatures
\NewDocumentCommand{\meter}{}{\musfig}

\endinput
```