The apa6e class*

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1 Introduction

This is a minimalist class file for formatting manuscripts in the style described the American Psychological Association (APA) 6th edition guidelines. Perhaps someday the more capable apa.cls will gain support for 6th edition APA formatting, in which case you should probably use it instead. But in the mean time, this class may be useful.

Note that this class relies heavily on existing LaTeX packages to do its work. If you're using a reasonably complete LaTeX distribution like TeX Live then you probably have them already, but if not then they can all be retrieved from CTAN.

2 Usage

Here's a sample document to get you started:

```
\documentclass{apa6e}
\usepackage{apacite} % This is not done automatically!
\bibliographystyle{apacite}
\title{A simple, correct explanation for every aspect of mental function}
\shorttitle{Psychology: the end}
\author{Over J.~Optimistic\\Pie in the Sky University}
\authornote{\dots}
\abstract{\dots}
\begin{document}
\maketitle
I have discovered a truly remarkable theory which
this example is too small to contain.
\bibliography{my-refs}
\end{document}
```

Pretty simple, really. But for a few more details, read on.

*This document corresponds to apa6e v0.3, dated 2011/03/03.

3 Appendices

In APA style, appendices are not named. So to get appendices, use the same mechanism as normal LaTeX(i.e., type `\appendix` to switch to 'appendix mode' and then use `\section` to start each appendix), but note that the section title will be ignored. You can type `\section{Stimuli}` or `\section{La La La}` or just `\section{}` and you'll get the same result regardless (something like "Appendix B").

3.1 References

This class does not provide any built-in support for formatting references in APA style; I suggest using either the classic apacite package, or the biblatex-apa package (which more accurately implements current APA guidelines, but depends on use of the new biblatex system).

If you do use apacite, then this package will automatically make sure that it uses the appropriate style of header. If you use biblatex-apa, then you're on your own — if you try this, please let me know whether you had to adjust anything!

3.2 Class options

This class supports several options.

3.2.1 `leavefloats`

When reading drafts, I find the APA manuscript format quite usable, except that I find it very annoying to have to flip back and forth between the text and tables/figures/their captions. Use this option if you want to let LaTeXdo use normal handling of floats, e.g.: `\documentclass[leavefloats]{apa6e}`.

To make sure you don't forget to take it out before submitting, this also inserts a large note on the front page to remind you that you are looking at a draft with illegitimate formatting.

3.2.2 `floatmarkers`

Some people like to leave little markers in the text that say "Figure 3 about here" and so on. As far as I can tell, this is actually not part of APA 6e style, but if you want to do it anyway, then this option is here for you: `\documentclass{floatmarkers}{apa6e}`.

3.2.3 `endnotes`

APA style allows footnotes to either be formatted as footnotes directly in the text, or placed at the end in a 'Footnotes' section. By default we do the former; if you really want the latter for some reason, then enable this option: `\documentclass[endnotes]{apa6e}`.

Of course, if you want multiple, then you can accomplish that in the usual way: `\documentclass[leavefloats,endnotes]{apa6e}`.

3.3 Known limitations

We currently make no attempt to alter the standard list environments (`itemize`, `enumerate`). As far as I can tell they are already APA compliant, but they might introduce enough extra vertical spacing as to be visually unpleasant. If this bothers you and you find a good solution, let me know. (Also, we don't even attempt to reproduce apa.cls's `seriate` environment. I'm not sure why one would use it in the first place.)

We only format manuscripts; in particular, there is no equivalent to apa.cls's `jou` or `doc` modes. I don't really see the point, personally, so I'm unlikely to fix this, but if you find one of these modes useful and want to write some code for it, then contributions are welcome.

3.4 Known *Non*-limitations

In apa.cls, you cannot have any blank lines around `\maketitle`, or formatting gets screwed up. When using apa6e.cls, you can use as many blank lines as you like. Go crazy.

In apa.cls, you must be careful about where you place your captions inside a floating environment — they must go at the top of `table` environments, and at the bottom of `figure` environments. In apa6e.cls, you can put your captions where-ever you want, and they'll still come out in the right place. One less thing to worry about.

3.5 New macros

`\mspart` This class defines just one new macro, and you shouldn't need to use it. But just in case... `\mspart` is a new sectioning command, designed to format the header at the beginning of each APA manuscript 'part' — e.g., the abstract, the main body, the references, etc. The syntax is exactly the same as for `\section` and friends, e.g.: `\mspart{Abstract}`. However, since all the standard manuscript parts are generated automatically by other macros, this is unlikely to be useful.

4 Implementation

Define our options, and then load up the standard article class.

```
\DeclareOption{endnotes}{\def\apaSIXe@endnotes\relax}
\DeclareOption{leavefloats}{\def\apaSIXe@leavefloats\relax}
\DeclareOption{floatmarkers}{\def\apaSIXe@floatmarkers\relax}
```

All unrecognized options are passed through to article.

```
\DeclareOption*{%
\PassOptionsToClass{\CurrentOption}{article}%
```

```
}
\ProcessOptions\relax
\LoadClass[12pt]{article}
```

We want to typeset everything in Times, including math.

```
\RequirePackage{times}
\RequirePackage{mathptmx}
```

Set margins and justification. If `\headheight` is less than 15 pt, FANCYHDR will complain.

```
\RequirePackage[margin=1in,headheight=15pt]{geometry}
\RequirePackage[document]{ragged2e}
```

APA 6e says that indents should be "5–7 spaces, or 1/2 inch". We'll use the latter.

```
\setlength{\RaggedRightParindent}{0.5in}
```

Doublespacing: The setspace package has the good taste to disable doublespacing for things like captions and footnotes; the APA doesn't. Which is totally reasonable, but it means that we can't use setspace. I stole this magic number from the setspace code — it is only correct for 12 pt font. But we only support 12 pt font anyway.

```
\newcommand{\@doublespacing}{\linespread{1.655}}
\@doublespacing
```

Set up the running header.

```
\RequirePackage{fancyhdr}
\setlength{\headheight}{15.2pt}
\fancyhf{}
\renewcommand{\headrulewidth}{0pt}
\rhead{\thepage}
\fancypagestyle{titlepage}{\lhead{Running head: \MakeUppercase{\@shorttitle}}}
\fancypagestyle{otherpage}{\lhead{\MakeUppercase{\@shorttitle}}}
\pagestyle{otherpage}
```

4.1 The title page

The commands to capture the various bits of the title page and abstract.

```
\newcommand{\shorttitle}[1]{\def\@shorttitle{#1}}
\renewcommand{\title}[1]{\def\@title{#1}}
\renewcommand{\author}[1]{\def\@author{#1}}
\newcommand{\authornote}[1]{\def\@authornote{#1}}
\renewcommand{\abstract}[1]{\def\@abstract{#1}}
```

And here's how we actually format the title page.

```
\renewcommand{\maketitle}{%
\thispagestyle{titlepage}%
\vspace*{1in}%
\Centering\@title\\\@author%
\vfill%
\ifdefined%
  \apaSIXe@leavefloats%
```

```
  {\large\textbf{\textit{A helpful reminder, courtesy \texttt{apa6e.cls}:} Figures and table
      your text for easier reading. Don't forget to remove the
      \texttt{leavefloats} option before you submit!}\vfill}%
\fi
Author Note\par\RaggedRight\@authornote%
\mspart{Abstract}%
\@abstract%
\mspart{\@title}}
```

By default, the apacite package will format the beginning of the references as if a section, by calling `\section{References}`. But that would be wrong. So we override the internal command that it uses to do this.

```
\AtBeginDocument{\def\st@rtbibsection{\mspart{References}}}
```

4.2 Captions

Caption formatting is complicated. For tables, captions go above the float body, and are formatted like:

Table 3
My fabulous table

For figures, captions go below the float body, and are formatted like:

Figure 7: My smashing graph.

```
\RequirePackage{float}
\floatstyle{plaintop}
\restylefloat{table}
\floatstyle{plain} % This puts captions below the figure
\restylefloat{figure}
\RequirePackage[singlelinecheck=off,justification=RaggedRight]{caption}
\DeclareCaptionLabelFormat{tablelabel}{\hspace{-\RaggedRightParindent}#1 #2}
\DeclareCaptionLabelFormat{figurelabel}{\hspace{-\RaggedRightParindent}\textit{#1 #2}}
\DeclareCaptionTextFormat{tabletext}{\hspace{-\RaggedRightParindent}\textit{#1}}
\captionsetup[table]{position=above,labelformat=tablelabel,labelsep=newline,
                     textformat=tabletext}
\captionsetup[figure]{position=below,labelformat=figurelabel}
```

4.3 Sectioning

First, disable section numbering.

```
\setcounter{secnumdepth}{0}
```

Now, redefine the various sectioning commands to look like APA titles — `\section` is APA level 1, `\subsection` is APA level 2, etc. This requires we use the `\@startsection` macro, which is very confusing. Apparently it is documented in something called `rep10.doc`; I found the relevant snippet at `http://help-csli.stanford.edu/tex/latex-sections.shtml` and reproduce it here for reference:

```
\@startsection {NAME}{LEVEL}{INDENT}{BEFORESKIP}{AFTERSKIP}{STYLE}
          optional * [ALTHEADING]{HEADING}
   Generic command to start a section.
   NAME       : e.g., 'subsection'
   LEVEL      : a number, denoting depth of section -- e.g., chapter=1,
                section = 2, etc.  A section number will be printed if
                and only if LEVEL < or = the value of the secnumdepth
                counter.
   INDENT     : Indentation of heading from left margin
   BEFORESKIP : Absolute value = skip to leave above the heading.
                If negative, then paragraph indent of text following
                heading is suppressed.
   AFTERSKIP  : if positive, then skip to leave below heading,
                      else - skip to leave to right of run-in heading.
   STYLE      : commands to set style
 If '*' missing, then increments the counter.  If it is present, then
 there should be no [ALTHEADING] argument.  A sectioning command
 is normally defined to \@startsection + its first six arguments.
```

`\section` `\subsection`

Now, the code. For level 1 and 2 titles, we give them just a *little* bit of extra vertical room — I find it makes them much easier to read.

```
\renewcommand{\section}{\@startsection {section}{1}{\z@}%
    {0.2\baselineskip \@plus 0.2ex \@minus 0.2ex}%
    {0.2\baselineskip \@plus .2ex}%
    {\Centering\normalfont\normalsize\bfseries}}
\renewcommand{\subsection}{\@startsection{subsection}{2}{\z@}%
    {0.2\baselineskip \@plus 0.2ex \@minus 0.2ex}%
    {0.2\baselineskip \@plus 0.2ex}%
    {\normalfont\normalsize\bfseries}}
```

`\subsubsection` `\paragraph` `\subparagraph`

For levels 3–5, we don't add any extra vertical spacing, but we do add just a little bit of extra horizontal space between the section name and the text. And of course, we need to handle the obligatory period.

```
\renewcommand{\subsubsection}[1]{\@startsection{subsubsection}{3}{\parindent}%
    {0\baselineskip \@plus 0.2ex \@minus 0.2ex}%
    {-\z@}%
    {\normalfont\normalsize\bfseries}{#1}\textbf{.}\hspace{0.2em}}
\renewcommand{\paragraph}[1]{\@startsection{paragraph}{4}{\parindent}%
    {0\baselineskip \@plus 0.2ex \@minus 0.2ex}%
    {-\z@}%
    {\normalfont\normalsize\bfseries\itshape}{#1}\textbf{\textit{.}}\hspace{0.2em}}
\renewcommand{\subparagraph}[1]{\@startsection{subparagraph}{5}{\parindent}%
    {0\baselineskip \@plus 0.2ex \@minus 0.2ex}%
    {-\z@}%
    {\normalfont\normalsize\itshape}{#1}\textit{.}\hspace{0.2em}}
```

`\mspart`

And we define a new sectioning command, for beginning 'manuscript parts' (e.g., abstract, main body, references). Unlike section headings, these should *not* be

bolded, but we do disable following indentation. (Note that we cheat and re-use the section counter, which doesn't matter since sections are unnumbered anyway.)

```
\newcommand{\mspart}{\newpage\@startsection {section}{1}{\z@}%
    {-0.2\baselineskip \@plus -0.2ex \@minus -0.2ex}%
    {0.2\baselineskip \@plus .2ex}%
    {\Centering\normalfont\normalsize}}
```

`\appendix` Appendix handling is pretty straightforward, except that we have to rearrange how floats are numbered (they go A1, A2, ... within appendix A), and this is complicated by the need to work properly with ENDFLOAT. So if the LEAVEFLOATS option is in effect, we'll want to change numbering immediately, but if we're putting floats at the end, then we need to arrange for the numbering changes to happen when ENDFLOAT is part of the way through processing the floats. This is done by defining `\apaSIXe@appendixfloats@setup` appropriately in the two cases, below.

The other slightly messy bit is that if there is only one appendix, it is called "Appendix", but if there is more than one, then the first is called "Appendix A". So we need to keep track of how many appendices the document contains. We do this using a nasty `\label` hack to get the necessary information into the `.aux` file.

```
\RequirePackage{ifthen}
\renewcommand{\appendix}{\setcounter{section}{0}
    \renewcommand{\section}[1]{\addtocounter{section}{1}
        \ifthenelse{\equal{\value{section}}{2}}
            {\label{apaSIXe@has@multiple@appendices}}
            {}
        \apaSIXe@appendixfloats@setup{\Alph{section}}
        \def\@currentlabel{\Alph{section}}
        \ifdefined\r@apaSIXe@has@multiple@appendices
          \mspart{Appendix \Alph{section}}
        \else
          \mspart{Appendix}
        \fi}}
\newcommand{\apaSIXe@appendixfloats@figureson}[1]{%
    \setcounter{figure}{0}%
    \renewcommand{\thefigure}{#1\arabic{figure}}}
\newcommand{\apaSIXe@appendixfloats@tableson}[1]{%
    \setcounter{table}{0}%
    \renewcommand{\thetable}{#1\arabic{table}}}
```

4.4 Endnotes

If the user requested endnotes, then set them up here. I'm not sure why you'd want this, but I wrote the code before realizing that ordinary footnotes were legal, so you get the benefit of my mistake.

```
\ifdefined\apaSIXe@endnotes
    \RequirePackage{endnotes}
    \renewcommand{\enoteheading}{\mspart{Footnotes}}
    \def\enotesize{\normalsize}
    \renewcommand{\footnote}[1]{\def\apaSIXe@hasendnotes\relax{}\endnote{#1}}
```

```
    \AtEndDocument{\ifdefined \apaSIXe@hasendnotes \theendnotes \fi}
\fi
```

4.5 Floats at the end

This must come after the endnotes handling above, since they both use `\AtEndDocument` and floats are supposed to come after footnotes.

If ENDFLOAT is in use, then we have to arrange for `\apaSIXe@appendixfloats@figureson` and `\apaSIXe@appendixfloats@tableson` to be called partly through the floats being processed. We accomplish this by writing out a calls to them in the `fff` and `ttt` files that ENDFLOAT uses. (Note that it's important to have two different commands — we used to have just one, but then whichever file was loaded first turned on the appendix mode half-way through, and then appendix mode was in effect for *all* of the other file.) If `floatmarkers` option is in effect, then we also need to make sure that the markers for floats in the appendix use the right numbers — and these use different counters.

```
\ifdefined\apaSIXe@leavefloats
    \newcommand{\apaSIXe@appendixfloats@setup}[1]{%
      \apaSIXe@appendixfloats@tableson{#1}%
      \apaSIXe@appendixfloats@figureson{#1}%
    }
\else
    \ifdefined\apaSIXe@floatmarkers
        \relax
    \else
        \PassOptionsToPackage{nomarkers}{endfloat}
    \fi
    \RequirePackage[nolists,noheads,tablesfirst]{endfloat}
    \AtBeginDelayedFloats{\@doublespacing}
    \newcommand{\apaSIXe@appendixfloats@setup}[1]{%
        \setcounter{postfig}{0}%
        \renewcommand{\thepostfig}{#1\arabic{postfig}}%
        \setcounter{posttbl}{0}%
        \renewcommand{\theposttbl}{#1\arabic{posttbl}}%
        \efloat@iwrite{fff}{%
            \string\makeatletter\string\apaSIXe@appendixfloats@figureson{#1}\string\makeatot
        \efloat@iwrite{ttt}{%
            \string\makeatletter\string\apaSIXe@appendixfloats@tableson{#1}\string\makeatoth
\fi
```

Change History

v0.1

General: Initial version 1

v0.2

General: Added support for appendices 1

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Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

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