The \texttt{newspaper} Package

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Abstract

The \texttt{newspaper} package redefines the page style and \texttt{\maketitle} command to produce a typeset page similar to that off a newspaper. It also provides several commands that (when used with other packages) allow the ease of writing articles in a newspaper-style column format.

1 Introduction

In the early part of 2007, the lab where I was working sent me off to Washington to be a staffer at the House of Representatives. So the lab wouldn’t forget about me – and also to keep up my \LaTeX{} skills – I decided to send back a newsletter once a month. To my great surprise, I couldn’t find a suitable \LaTeX{} package for typesetting a newsletter. Therefore, I set about to write the package myself. The \texttt{newspaper} package is the result of this effort.

This package is a very simple package that redefines the page style and \texttt{\maketitle} command to produce a typeset page similar to that off a newspaper. It also provides several commands that (when used with other packages) allow the ease of writing articles in a newspaper-style column format. The result of the \texttt{\maketitle} command is shown in Figure 1. As you can see from the figure, the style is based on that of the \textit{New York Times}. Commands for redefining the default values for Title, Date, and Slogan are described in the sections below.

2 Requirements

This system requires both \LaTeX{} 2e and the \texttt{yfonts} package developed by Walter Schmidt. The package itself is never actually loaded, but the \texttt{ygoth} font is called and used to typeset the heading. These are the only required packages. However, several additional packages (e.g., \texttt{multicols} by Frank Mittelbach and \texttt{picinpar} by Friedhelm Sowa) enhance the use of the \texttt{newspaper} package. Examples of these additional packages are discussed in Section 3.2.
Figure 1: Default heading acquired with the \texttt{newspaper} package.

\section{User Interface}

When loaded \texttt{newspaper} sets up a number of defaults (detailed later). These defaults can be modified by specific commands. Load the package in the usual way as

\usepackage{newspaper}

which immediately redefines the page style on the first page to resemble that of a newspaper, as shown in Figure 1. It also redefines the page style on all subsequent pages to provide the appropriate title, date, and page number.

There are three commands that must be set in the preamble of the document. That is, they must be defined before the \texttt{\begin{document}} command. These commands are:

\begin{verbatim}
\date{\langle date\rangle}
\currentvolume{\langle real\rangle}
\currentissue{\langle real\rangle}
\end{verbatim}

where \texttt{\langle date\rangle} is the date (which could be \texttt{\today}), and \texttt{\langle real\rangle} is any real number. The volume number is set in Roman numerals and the issue number is set in arabic numerals as shown on the left side of Figure 1.

\subsection{Default Behaviour and Commands to Modify It}

The default parameters of the \texttt{newspaper} package are shown in Table 1. Without actually specifying any changes, these settings will produce the output shown in Figure 1.

You'll notice there are two parameters that contain a similar setting: Paper Name and Header Name. This is necessary because the first page has a different heading page style than all subsequent pages. On this first page, the heading is that shown in Figure 1, in which the Paper Name is set with \texttt{gothic} font. In this font some letters appear different from modern type. Specifically the modern \texttt{s} is defined specifically by adding the colon. If that isn’t done, the gothic \texttt{s} is used, which looks more like the modern \texttt{f} than the modern \texttt{s}.

All subsequent pages have a different heading that is comprised of the Header Name which is supposedly the same as the Paper Name but set in whatever font
is used for the main text. If we used just one parameter (say the Paper Name) we would run the risk of having colons appear after characters in the heading on subsequent pages.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper Name</td>
<td>Committee Times:</td>
</tr>
<tr>
<td>Header Name</td>
<td>Committee Times</td>
</tr>
<tr>
<td>Paper Location</td>
<td>Washington DC</td>
</tr>
<tr>
<td>Paper Slogan</td>
<td>“All the news...”</td>
</tr>
<tr>
<td>Paper Price</td>
<td>Zero Dollars</td>
</tr>
</tbody>
</table>

Table 1: Package Defaults

If you would like to customize the parameters, the appropriate commands are shown in Table 2. For example, to change the title of the paper simply add a line in the preamble that contains \SetPaperName{My Title}. Remember, to change the header name appropriately (in this case by adding \SetHeaderName{My Title}).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Command to Change Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper Name</td>
<td>\SetPaperName{(text)}</td>
</tr>
<tr>
<td>Header Name</td>
<td>\SetHeaderName{(text)}</td>
</tr>
<tr>
<td>Paper Location</td>
<td>\SetPaperLocation{(text)}</td>
</tr>
<tr>
<td>Paper Slogan</td>
<td>\SetPaperSlogan{(text)}</td>
</tr>
<tr>
<td>Paper Price</td>
<td>\SetPaperPrice{(text)}</td>
</tr>
</tbody>
</table>

Table 2: The necessary commands to affect package behaviour.

### 3.2 Additional Suggested Packages

The use of additional packages will greatly enhance the appearance of any “newspaper” style document. First and foremost, the multicols package by Frank Mittelbach is by the far the best means of producing columns of text. Unlike the \twocoloum command available to \LaTeX, the multicols package makes it possible to go between one column, two columns, and three columns of text on the same page.

Two other very useful packages are the picinpar package by Friedhelm Sowa and the hyperref package by Sebastian Rahtz. The picinpar package provides several useful commands for creating empty rectangular spaces within a block of text. This is especially useful for setting figures in columns of text – especially since the multicols package does not allow the use of floats inside columns.

The hyperref package is always a good idea when the final format is a PDF file. The package provides a wealth of commands that enable hyperlinks, and govern how the file is opened and displayed. For example, when I was sending
my newsletters back to the home office, I had a self-imposed maximum-length constraint of two pages. Keeping a newsletter short is one way to increase the number of people that will actually read it. Loading the \texttt{hyperref} package with the options

\begin{verbatim}
\usepackage[pdfpagemode={none},
            pdfpagelayout={TwoColumnRight}]{hyperref}
\end{verbatim}

ensured the resulting PDF file opened with bookmarks closed and in two-page display mode.

One other package I found very useful was the \texttt{Times} package. It’s a small package, in fact the entire contents of the package is only three lines of code:

\begin{verbatim}
\renewcommand{\sfdefault}{phv}
\renewcommand{\rmdefault}{ptm}
\renewcommand{\ttdefault}{pcr}
\end{verbatim}

The package changes \TeX{}’s default San Serif, Roman, and Type Writer fonts to Helvetica, Times-Roman, and Courier respectively.

As a general rule, Times-Roman (or Times New Roman as its variants are sometimes called) is a terrible font and should always be avoided. There is, however, one exception to the rule: when setting columns of text. The Times New Roman typeface was developed in 1931 for \textit{The Times} of London. The letters are more narrow than other typefaces and the ascenders and descenders are smaller. This makes it ideal for newspapers, that always strive to squeeze more words onto a single page in order to reduce production costs. Its economic advantage has made it popular with book publishers in the United States.

The ability to squeeze more words onto a page is advantageous if you have a maximum length constraint of two pages, as I did for my newsletters. Even though the letters are narrow, reading short columns of text is easier on the eyes than moving your eyes back and forth across the length of an entire page. Such a font should never be used to set large pages of text because it will fatigue the eyes of the reader.

An example of using the \texttt{newspaper} package in combination with the packages mentioned above is shown in Figure 2.
Scientists Begin New Job at Congress

This February, Matthew Allen, a nuclear engineer by training and staff physician at Sandia National Laboratories, arrived in Washington D.C. to begin a one-year assignment as an ASME Congressional Fellow at the House of Representatives, Homeland Security (HS) Committee. The HS Committee is chaired by the Honorable Bennie Thompson, a democrat from Mississippi. The Honorable Pete King, a Republican from New York, leads the minority staff.2

Chairman B. Thompson (D-MS)
Ranking Mem. Pete King (R-TX)

Dr. Allen will be one of 19 staffers on the minority-side—the majority is allotted 38 staffers. March has been a busy month for the HS Committee. They recently passed H.R. 444, the "Promoting Anti-terrorism Cooperation through Technology and Science (PACTS) Act," and H.R. 1401, the Rail Bill—a bill intended to improve the security of rail-based transportation. March has also been a busy month at the scientific level. Two Hearing Memos have been released, both of which are related to nuclear energy and national security.

The first hearing was held on March 14 and examined studies from the Government Accountability Office (GAO). The GAO issued a report highlighting concerns with the Nuclear Incident Management Annex (NIMA) and the National Nuclear Security Administration (NNSA). The report found that the NIMA was not ready for use and that the NNSA was not adequately prepared to respond to a nuclear incident.

The second hearing was held on March 21 and examined studies from the Department of Energy (DOE) and the Nuclear Energy Institute (NEI). The hearing focused on the role of the Nuclear Regulatory Commission (NRC) in regulating nuclear power plants. The hearing concluded that the NRC needed to improve its oversight of nuclear power plants to ensure public safety.

The third hearing was held on March 22 and examined studies from the Department of Homeland Security (DHS) and the Domestic Nuclear Detection Office (DNDO). The hearing focused on the role of DNDO in developing and testing technologies to detect and respond to nuclear threats. The hearing concluded that DNDO needed to improve its coordination with other federal agencies to achieve effective nuclear detection and response.

ETC SUBCOMMITTEE HOLDS TWO HEARINGS WITH DNDO

In the month of March the ETC Subcommittee held two hearings that directly related to the oversight of the Domestic Nuclear Detection Office (DNDO). The first hearing focused on DNDO's efforts to develop and test technologies for detecting and responding to nuclear threats. The second hearing focused on DNDO's efforts to develop and test technologies for detecting and responding to chemical and biological threats.

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3.3 Newspaper Macros

The package provides a few macros that help when writing articles in column format. As seen in Figure 2, I typically used a three column format, but these commands also work for any size column.

\headline{⟨text⟩}

The \headline{⟨text⟩} command is used to set the headline of the article. It’s a good idea to use different style headlines for each article. This helps the reader distinguish between different topics. As you can see from Figure 2, I have used several different styles for the three articles I produced.

Using the above two commands the articles shown in Figure 2 would be set with the following commands:

\headline{\bf\sf\LARGE Scientist Begins New Job At Congress}\langle body of the article⟩\closearticle

\headline{\sc\Large ETC Subcommittee Holds Two Hearings with DNDO}\langle body of the article⟩\closearticle

When writing an editorial or if you just want to add a by-line, use the \byline command. This command works in almost the same way as \headline, but has an additional argument for the author credit. The author name is set in all uppercase letters after the word “By” directly under the article headline. The command is called by

\byline{⟨headline⟩}{⟨author⟩}

where \{⟨headline⟩\} is the title of the article and \{⟨author⟩\} is the name you would like to appear under that title.

If you want to add a subtitle before the The headline/byline combination as shown on the second page of Figure 2, you have to play with the spacing a little bit. The command used in the example is:

\byline{{\it\huge Life on the Hill}\[10pt\]{\Large The First Four Weeks}\[10pt\]}{Matthew Allen}

Someday I may go back and add a \subtitle command, but for now I just play with the spacing manually.

\closearticle

The \closearticle command is used to show the end of an article. This command produces a small double-line rule the width of the column. It is useful when an article ends in the middle of column, before you declare the next headline. The \closearticle command does contain the parameter \hsize, which is the value of column width used by the multicols package. If you’re not using the multicols package, this command could produce an error.
4 Implementation

Here we load the only \textit{required} package.

```latex
\begin{verbatim}
\%% Package Loading \%%
\RequirePackage{yfonts} % used for the paper title font
\end{verbatim}
```

Next we have the main body of the code, and begin by defining the font used for the Headline.

```latex
\begin{verbatim}
\%% Define font for page title \%%
\DeclareFontFamily{LYG}{bigygoth}{}
\DeclareFontShape{LYG}{bigygoth}{m}{n}{<->s*[2.5]ygoth}{
\end{verbatim}
```

Next we set up the page dimensions. We could have used the \texttt{geometry} package here, but I like to avoid loading packages when I can. The default values for the \texttt{article} class are shown to the right of the length commands.

```latex
\begin{verbatim}
\%% Define Text Dimensions \%%
\setlength\topmargin{-48pt} % article default = -58pt
\setlength\headheight{0pt} % article default = 12pt
\setlength\headsep{34pt} % article default = 25pt
\setlength\marginparwidth{-20pt} % article default = 121pt
\setlength\textwidth{7.0in} % article default = 418pt
\setlength\textheight{9.5in} % article default = 296pt
\end{verbatim}
```

\currentvolume \currentissue

Define the volume and issue number. These values must be entered manually.

```latex
\begin{verbatim}
\%% counters for volume and number \%%
\newcounter{volume}
\newcommand\currentvolume[1]{\setcounter{volume}{#1}}
\newcounter{issue}
\newcommand\currentissue[1]{\setcounter{issue}{#1}}
\end{verbatim}
```

\@papername \@headername \@paperlocation \@paperslogan \@paperprice

Set up the package defaults

```latex
\begin{verbatim}
\def\@papername{Committee Times:}
\def\@headername{Committee Times}
\def\@paperlocation{Washington DC}
\def\@paperslogan{''All the News I Feel Like Printing.''}
\def\@paperprice{Zero Dollars}
\end{verbatim}
```

\SetPaperName \SetHeaderName \SetPaperLocation \SetPaperSlogan \SetPaperPrice

Set up the commands to modify the behavior.
Redefine the \maketitle command. This is only for the first page.

At this point we redefine the page style for all subsequent pages.

Define the \headline and the \byline commands. The \closearticle command is intended to be used at the conclusion of each article.