

Travels in T_EX Land: A sidebar for a book

David Walden

Abstract In this column in each issue I muse on my wanderings around the T_EX world. In this issue I describe a small effort to typeset a sidebar for a book project.

The problem

For several years, I have been working on a multi-author book on the history of computer activities at the company where I worked for 27 years before I retired. While I drafted a few chapters in L^AT_EX, all but one of the chapters by the other authors came to me as Word files, which I converted to L^AT_EX using various ad hoc techniques (but that's another story). Since my co-authors (and one-time colleagues in a high tech company) do most of their publishing in technical journals, they are used to being able to have sidebars in their writings, which some technical journals seem to encourage, perhaps because sidebars help papers look less academic. Thus, several of the papers came to me with several-paragraph chunks labeled "this is a sidebar for somewhere in the previous section." So, I needed to figure out an approach to typesetting sidebars in L^AT_EX (I was not using Memoir which appears to have a built-in sidebar capability).

Initial attempt

First I consulted *The L^AT_EX Companion, 2nd edition* and the `comp.text.tex` discussion group. These sources led me to `shadbox.sty`, but it wasn't clear to me yet how I would make use of that although I liked the idea of setting a sidebar off with a grey-shaded background, such as I have often seen in technical journals.

I decided to first try to put an example sidebar in a box at the top of a page before trying anything fancier. Again consulting *The L^AT_EX Companion, 2nd edition* and the `comp.text.tex` discussion group, I found the `boxedminipage` environment. The following code

```

\begin{figure}
\begin{boxedminipage}{5.5in}

\medskip
\small

\centerline{\textbf{Twenty-eight years later}}
\medskip

\begin{quotation}
\noindent{}I always thought the ‘‘great breakthrough’’ was the notion
that multiple analysts could have random access and share an
...
...
\end{quotation}
\end{boxedminipage}
\end{figure}

```

produced a rudimentary sidebar display as shown in the file *sidebar-example.pdf* on the HTML page for this column. The 5.5in argument to the boxedminipage environment made the sidebar be as wide as the text block for book pages. The figure environment floated the sidebar to the top of a page.

Trying for greater refinement

It seemed like it was time to ask a specific question of someone knowledgeable, and I sent the following email query to a couple of friends in the T_EX world.

```

In the book I am working on, I need to format a few sidebars.
My current attempt using a box at the top of a page is shown
on the attached page.

```

```

My first thought was to leave out the box and put the sidebar
on a shaded background, like magazines often do, but I haven't
yet figured out how to do that.

```

```

Do you have a suggestion for a better format for a

```

sidebar in a book that is not too hard to implement.
I am using plain LaTeX.

Steve Peter, a member of the editorial board of this journal, sent back the following response.

```
> My first thought was to leave out the box and put the sidebar  
> on a shaded background, like magazines often do, but I haven't  
> yet figured out how to do that.
```

How are you planning on printing it? If the resolution isn't high enough, it will look like mud.

```
> Do either of you have a suggestion for a better format for  
> a sidebar in a book that is not too hard to implement.
```

Depending on the answer to the question above, you might want to capitalize on the horizontal bar under the header and print the title of the sidebar in reversed type on a thick black bar and end the sidebar with a horizontal bar or two (thin-thick looks elegant).

Attached to Steve's reply was an example of what he was describing, shown in the file `steve-peter-example.png`.

Well, that looked very good, but now I had to figure out how Steve did the reverse type on a thick black bar; it would be too embarrassing to have to query him again about how he did that.

Coding Steve's suggestion

I don't remember ever using a horizontal rule in LaTeX, so I Googled for LaTeX rule (I was too lazy to walk over to *The LaTeX Companion* which I had reshelved since the previous lookup I did in it). Some miscellaneous website showed me

```
\rule[raise-height]{width}{thickness}
```

and I tried the following

```
\rule{5.5in}{1pt}
```

```
\rule{5.5in}{3pt}
```

which produced



and led me to the issue of how to get the rules closer together, as in Steve's example.

After grappling for a few minutes with how to break to a new line and then put in an arbitrary amount of vertical space (negative arguments to `vspace` perhaps, or something to do with `baselinestretch`), it occurred to me to try using the optional first argument of `\rule` (after all, `raise-height` seemed somehow relevant). Sure enough

```
\rule{5.5in}{1pt}
```

```
\rule[.13in]{5.5in}{2.5pt}
```

did the job.



Next came the question of how to write in reversed type on a thick black rule and, thus, I Googled on `latex color of type`, which got me to

```
\usepackage{color}
```

```
\textcolor{color}{words to be in color}
```

By changing the text color to white in combination with a wide rule, i.e.,

```
\rule{5.5in}{15pt}
```

```
\vspace{-19pt}
```

```
\centerline{\textcolor{white}{words to be in color}}
```

I obtained



Lastly, I put double rule for the bottom and white text on a wide black rule for the top together with my sidebar figure, as follows

```

\begin{figure}

\medskip
\small

\rule{5.5in}{15pt}

\vspace{-19pt} \centerline{\textcolor{white}{\textbf{Twenty-eight
years later}}}
\medskip

\begin{quotation}
\noindent{}I always thought the ‘‘great breakthrough’’ was the notion
that multiple analysts could have random access and share an
...
...
\end{quotation}

\medskip
\rule{5.5in}{1pt}

\rule[.13in]{5.5in}{2.5pt}
\end{figure}

```

It worked, and it was time to create a new environment (with slight refinements) for use at several places in my book:

```

\newenvironment{mysidebar}[1]
{%begin part of env.
\begin{figure}[t!]
\small
\rule{5.5in}{15pt}

\vspace{-16pt} \centerline{\textcolor{white}{\textbf{#1}}}
\medskip

}
{%end part of env.

```

```
\rule{5.5in}{1pt}

\rule[.13in]{5.5in}{2.5pt}
\end{figure}
}
```

No doubt I will have to do some additional tweaks to this new environment as I use it at various places in my book.

This was a pretty trivial topic to dedicate a column to, but that's how \LaTeX problems often seem once I have put them behind me. I guess I can now show Steve Peter my new environment and see what more elegant approach he would have used. Hopefully my solution is not so inelegant that querying him again is still embarrassing.

Follow-up from other columns

In several of these columns over the past year, I have discussed my experiences as I learned about self-publishing, and eventually I summarized what I had learned in a single memo. The \TeX users group for The Netherlands (NTG) asked if it could print my memo on self-publishing in their journal *MAPS*; I guess the editors of *MAPS* agree with me that the next step after typesetting a book is actually getting the book published and distributed, and \TeX users will also benefit from knowing about this next step. I agreed to their request and set about revising my memo to make it more coherent. The memo has now been published in *MAPS*, but it also is on my website (with on-going revisions) for anyone who is interested:

www.walden-family.com/public/notes-on-self-publishing.pdf

Acknowledgments

Obviously, Steve Peter's advice helped me a lot. Yuri Robbers caught several typos. Lance Carnes caught several more. Dirk Baechle caught one more. Karl Berry also proofread the column.

Biographical note

David Walden is retired after a career as an engineer, engineering manager, and general manager involved with research and development of computer and other high tech systems. He holds an undergraduate math degree and completed a graduate school sequence of courses in computer science. More history is at www.walden-family.com/dave.