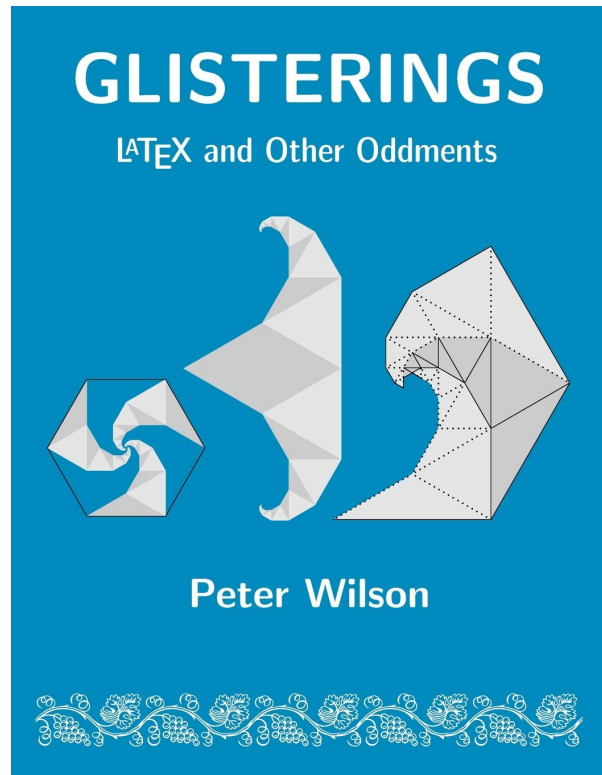


Book review: *Glisterings*, by Peter Wilson

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Peter Wilson, *Glisterings. L^AT_EX and Other Oddments*. T_EX Users Group, Portland, Oregon, USA, 2020, paperback, 130pp., US\$15.00, ISBN 978-0982462621.



Many many years before people were reading `tex.stackexchange.com` on their smartphones, the primary forums for asking T_EX questions were the list `texhax@tug.org` (still in lively existence) and the Usenet group `comp.text.tex` (also still in existence, though not so lively), or `ctt` as it was known to aficionados. I guess that before `texhax` and `ctt`, in the prehistoric times when people exchanged T_EX tapes and freshly knapped stone axes, there were T_EX-related BBSes, but I do not have reliable information about those. Anyway, many of old timers remember these long Usenet discussions about T_EX tricks, where Peter Wilson was prominent with his clever solutions and lucid explanations. Even more people know Peter Wilson for his `memoir` class — a great example of exquisite typesetting. The manual of the class is a great introduction not only to the class itself, but also to the typesetting of books in general.

Starting in 2001, Peter published a column *Glisterings* in *TUGboat*. The articles consisted of fairly

short discussions of tricky L^AT_EX problems and their solutions. Some material of this column was based on the discussions in `ctt` and `texhax`. For many years these articles were the favorite part of the journal for me — and, I guess, for numerous other readers.

Now TUG has published these columns in a book, and one can reread them collected together. After doing this myself, I recognized how much my T_EX style was shaped over the years by them. It was a joy to recall the times when I discovered these little gems of T_EX programming — and to find the things overlooked at the first reading.

The subjects in the articles vary from complex problems like string parsing to the textbook-like explanation of subjects like the ways of defining new macros in T_EX and L^AT_EX. The columns about paragraphs and their shapes are probably among the most useful in the book. The T_EX way of dealing with paragraphing is rather complex, and Peter explains it with his characteristic lucidity and clearness. Besides T_EX and L^AT_EX, the book discusses fonts, ornaments and other printer devices, MetaPost (the image on the cover, a *spidron*, is created with MetaPost; see Figure 1), and many other topics. As another proud owner of Lanston Type Company's *LTC Fleurons Granjon* (LTC is now a division of P22 Type Foundry, `p22.com`), I was especially interested in the chapter about using the Fleurons in L^AT_EX. It gives very useful advice on getting the glyphs aligned.

Of course T_EX has changed over these years. While some problems discussed in the book now have somewhat more straightforward solutions (for example, string manipulations today would be probably based on the `xstring` package), it is surprising how much of the book is still very relevant today and is required reading for an aspiring T_EXnician.

The style of Peter's writing is fascinating. The author's subtle British humor makes the reading pleasant and far from the dry stuff filling many technical books. The reader meets this self-deprecating humor on the first page of the Introduction:

For many years Jeremy Gibbons edited a very successful column in the T_EX Users Group journals *T_EX and TUG NEWS* and *TUGboat* called *Hey — It works!* [52]. I learnt much from this but apparently not enough to decline when asked to take over the column. On the other hand I have learnt to my cost that the quickest way to get a correct answer to a question on the `comp.text.tex` (`ctt`) newsgroup is to give an incorrect answer. In order not to sully Jeremy's reputation my first thought was to change the title to *Hey — It might work* but after some consideration the new title is

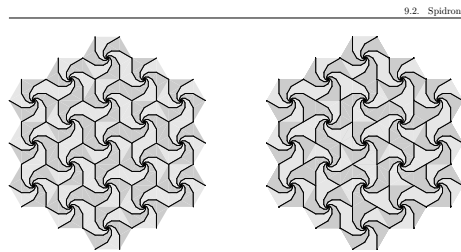


Figure 9.5: Tilings: (left) Spidrons can do it alone; (right) Horafakes need spidrons

What was missing from this article was any hint as to what those ‘right combinations’ of folds might be to create these effects. After some searching on the web I found the following remarks by Erdős [40].

I folded every second edge, reaching to the centre of the created hexagon in the given Spidron system, as a spine and folded every first edge as a groove. The resulting relief-like surface, under the impact of an external deforming force, does not show simple linear displacements, such as those produced with an accordion; instead, the edges between the vertices and the centres of the original hexagonal system move in a vortex within each hexagon.

After a lot of cogitation and physical experimentation I came to believe that among the ‘right combinations’ are the ones shown in Figure 9.6, which shows half a hexagon with three semi-spidrons. The dotted lines indicate ‘valley’ folds (paper on either side of the fold, or crease, is bent upwards) and the full lines indicate ‘mountain’ folds (paper on either side of the crease is bent downwards).

If you want to create a large construct for folding, here is the code for generating the spidron tiling shown in Figure 9.5. You can, of course, modify this to meet your needs.

```
% glatr9.sp MP spidron figures
% earlier pictures
beginfig(5); % spidron tiling
```

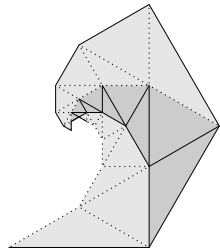


Figure 9.6: Folding. (Editor’s note: We gratefully acknowledge Jeremy Gibbons’ paper ‘Dotted and dashed lines in METAFONT’, TUGboat 16:3 (1995), <https://tug.org/TUGboat/tb16-3/tb09gibb.pdf>, which aided us in finalizing this figure, and a fascinating read in itself.)

Figure 1: A page from the column about spidrons

as you see it earlier — *Glisterings* — implying that there might be some dross among the nuggets.

and continues to walk along with it during the journey through the book.

Another part of the book’s charm are the epigraphs throughout. They are funny and wise, providing a surprising counterpoint to the point of the text. For example, the section about changing the layout starts with a note by Samuel Johnson,

Change is not made without inconvenience, even from worse to better.

The section about the “superstitious” version of *enumerate* designed to eliminate an item no. 13 is accompanied by the apt passage from George Orwell’s 1984:

It was a bright cold day in April, and the clocks were striking thirteen.

The book is lovingly typeset by Peter, reminding us that the author is a TeX wizard and typesetter of a very high caliber. The techniques discussed in the book are illustrated by the book itself; for example, a page of the column about ornaments has a nice frame around it (Figure 2).

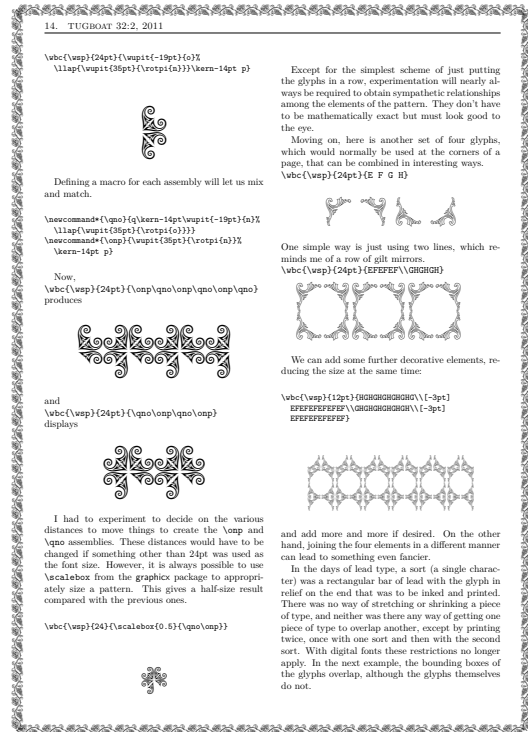


Figure 2: A page from the column about ornaments

When compiling the columns in the book, the author gathered the references from each into a joint bibliography, and added an index—a very useful device for a compendium of disjoint materials like this one. He also rearranged epigraphs and deleted the repeated ones. The resulting book is a welcome addition to a library of a (L^A)TeX student or even TeXnician—indeed, even for those of us who have a collection of TUGboat issues for the last twenty years. I wholeheartedly recommend it.

Glisterings is the third book published by TUG, after a volume of interviews (2009) and the 2⁵ anniversary collection of papers (2010). This is a fitting continuation of the series. They are all available from tug.org/books, as well as in the general online stores. I hope that we keep publishing the books under our own imprint—perhaps next time without a 10 year hiatus.

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