

Software

Editor's Introduction

Helmut Jürgensen

The Software Column of this TUGboat issue is a call for help—your contributions or suggestions!

Some of the things we would like to receive are outlined below. If you consider submitting material which you feel would fit into the Software Column but which is not covered by the list, please submit it anyway—or contact me.

\TeX has come of age now—everybody said so at the TUG meeting. The main interest of TUG members seems to shift away from “mere” implementation questions gradually, and towards “real” typesetting problems. Nevertheless, it also seems that there are still quite a few difficulties arising when embedding the \TeX and **METAFONT** systems into different environments in a user-friendly fashion. A lot of software has been and is being written to handle the problems. In fact, judging from some discussions I had at the TUG '84 meeting, it is written again and again and again. Therefore, I think the TUGboat and this column could help in distributing information and discussing ideas.

Please send descriptions of \TeX and **METAFONT**-related software: They could be short, giving only name, purpose, availability, and—enough—important technical data. They could be long as well, if of sufficiently general interest. In some cases novel software methods may require a more thorough treatment. **WEB**-related problems would form another area of interest.

In general, information about software used in the implementation of the \TeX , **METAFONT**, and **WEB** systems, in the adaptation to your environment or your research work, about enhancements to these systems, or software engineering comments related to these systems are welcome.

I should also appreciate receiving suggestions about the column in general, comments on articles, hints about related publications elsewhere, etc.

Please send your contributions and ideas to
 Helmut Jürgensen
 Department of Computer Science
 The University of Western Ontario
 London, Ontario
 Canada N6A 5B7

You can also reach me by phone (519-679-3039) or via usenet (deepthot!uwo!uwo-hobbit!jurgensen).

Please remember, I need your contributions—otherwise the column will starve—and I must have them no later than two weeks before the general TUGboat deadline.

\TeX Extensions

How to Run \TeX in a French Environment: Hyphenation, Fonts, Typography

Jacques Désarménien

1. Introduction

One of the greatest achievements of text-processing programs—especially \TeX —is that they allow anybody to produce beautiful, typeset-like documents by merely typing a correctly prepared manuscript on a terminal, using a keyboard very similar to that of an ordinary typewriter.

As a consequence, before trying to train professional typists in \TeX , one must ensure that a replica of the keyboard they are used to will appear on the terminal. In our situation, this means that some extra characters—é, è, ç among others—have to be included where they usually appear on a French keyboard. Some others must be displaced: for example, a and q have to be permuted and the digits retain their positions but must be typed by using the SHIFT key. The solution to these specific problems, and a certain number of improvements to the input of \TeX , have been given by D. Foata and Y. Roy in Strasbourg [fr].

The main concern in processing French text is hyphenation. The set of patterns that \TeX uses to hyphenate English works very poorly in French. The procedures are fundamentally different, not only because the etymology has much more importance in English, but also because the syllabifications do not obey the same rules in both languages. The same word might not be hyphenated the same way in French and in English: *ma-gni-fi-cence* vs. *mag-nif-i-cence*. We explain in another article