Comment on “\TeX\ Does Windows”

Jim Fox

The emphasis of the “window paragraphs” article in the March TUGboat seems to be somewhat misdirected. It is not so big a deal that \TeX\ can be made to format such paragraphs, indeed the 14th and 15th chapters of the \TeX\book describe completely and in detail the means both to specify paragraph shape and to split off parts of said graphs essentially trivial. Nor should the emphasis be placed on the paragraphs themselves (the hole being distracting and making the paragraphs hard to read, especially when the hole produces not only a gap between words but a hyphenated word across the gap as well. The emphasis instead belongs on the \TeX\ itself, and the graphs with ease. And one should note that the holes can be of arbitrary shape, and there can be several of them in the paragraph.

Queries

Editor’s note: When answering a query, please send a copy of your answer to the TUGboat editor as well as to the author of the query. Answers will be published in the next issue following their receipt.

The following items, which appear elsewhere in this issue, are in response to, or otherwise relevant to, previous queries.

- Indexing with \LaTeX\ (Jim Ludden, Vol. 7, No. 2, page 111), see page 201.
- Setting parallel texts (John Stovall, Vol. 2, No. 2, page 57), see page 190.

Time Line Macro

This query elicited no response when it was published in \TeX\hax, so I will try the TUGboat audience. In addition to being quite useful for its (admittedly specialized) purpose, it would seem to be a challenging exercise for an expert — something along the lines of some of the esoteric exercises in the \TeX\book or the tree-making macro of last year’s TUGboat. I offer it as such a challenge.

I would like a macro which makes a “time line”. It would read a file which consists of entries of the form

\[ (\text{date}) \quad (\text{event}) \]

(presorted if necessary) and produce a vertical line of some preassigned length with tick marks so that the top of the line represents the first date (or \#1 in the macro call) and the bottom represents the last date (or \#2). Down the line, with vertical spacing mimicking (and that is the key point) time intervals, the dates and events are printed horizontally out to the right. One problem is to do something intelligent when two or more of the dates cluster too closely (e.g. two events on the same date). One can see the general idea, but also many \TeX\nical details. Alternately (perhaps less interestingly), one could write a preprocessor in C or Pascal.

Sometimes the time scale is linear (e.g. for the history of the USA); sometimes a logarithmic scale is appropriate (e.g. cosmological events since the beginning of the universe — as much happened in the first second or so as since — or, compressing in the opposite direction, the chronology of life on earth). Such time lines are a useful semi-pictorial way of presenting chronologies, but are somewhat awkward to create with conventional typesetting. Any takers?

James Alexander
University of Maryland