

built from a very small number of editing primitives. It suggests therefore that the standard define any text editor implemented in the language of Part Three to be compliant and that an Appendix to the document contain examples of such definitions for typical line, character, and screen editors. These examples would suggest to users of related editors how the listed code could be modified to incorporate each user's preferred enhancements. Part Ten will describe procedures for registering items such as document styles, markup conventions, and formatting macros. Although registered items will not be standardized, they will be available to all users who wish to access them. Users at one site can thereby take advantage of work done by individuals at another location.

Copies of the current working draft can be obtained from

Charles D. Card  
Sperry Corporation  
M.S. C1-NE10  
Blue Bell, PA 19424

In addition, visitors are welcome to observe and participate in the meetings. The next sessions will take place October 24–28 in Detroit, January 23–27 in Anaheim, and May 14–18 in Phoenix. TUG's X3J6 liaison is Lynne Price, who will happily transmit feedback from TUG members to the committee. TUG members are of course encouraged to contact her for more information.

\* \* \* \* \*

Software

\* \* \* \* \*

## A NOTE ON HYPHENATION

Donald Knuth

Some people occasionally write to me about hyphenations that T<sub>E</sub>X finds, because T<sub>E</sub>X doesn't always match the way their own dictionaries do it. In almost all cases, such discrepancies prove to be unavoidable, because different dictionaries don't agree with each other.

Consider, for example, the word "process." T<sub>E</sub>X hyphenates 'pro-cess', in accordance with *Webster's Third*, while many dictionaries say 'process'. I don't believe T<sub>E</sub>X does anything wrong here; indeed, I would never like to see 'proc-' at the end of one line and 'ess' at the beginning of the next, since I would probably have already pronounced the word wrong in my mind before my eyes reached the second line.

Another interesting case is "performance." Here *Webster's Third* and *American Heritage*, etc., say 'per-form-ance', but T<sub>E</sub>X says 'per-for-mance'. This case is interesting because it turns out that *Webster's New Collegiate*—published many years after the infamous *Third*—also says 'per-for-mance'; so does *Random House Unabridged*. The latter hyphenation is evidently more consistent with other words of English, since T<sub>E</sub>X's patterns are based on a large mass of data, so here we see a trend in dictionaries to be more uniform.

So far I have run across only one improperly hyphenated word, in thousands of test pages: 'exam-smanship'. But I wasn't too upset, because I deserved such a fate after making up that word.

Bob Filman has also shown me the very unfortunate 'Di-jkstra'; there's a case where many T<sub>E</sub>X users will want an entry in their exception dictionaries.

I think it would be useful to have a catalog of desirable hyphenation exceptions maintained somehow in *TUGboat*; let me begin this with its first entry, 'Dijk-stra'. Let me also beg readers not to contribute further entries unless they are sure that all of the standard authorities disagree with T<sub>E</sub>X's hyphens. (Sometimes we have found that *Webster's* is not as good as others, but we usually have followed it.)

And one more point: If any computer center decides to preload different exceptions from those in plain T<sub>E</sub>X (i.e., in the file HYPHEN.TEX), the changed exceptions should not under any circumstances be put into HYPHEN.TEX or PLAIN.TEX. All local changes should go into a separate file, so that T<sub>E</sub>X will still produce identical results on all machines. You can run your program elsewhere by simply sending the file of local changes. In fact, I recommend not preloading those changes, but rather assuming that individual users will have their own favorite collection of updates to the standard format files.

\* \* \* \* \*

Editor's note: At the TUG meeting, Don gave some interesting statistics on the performance of the hyphenation algorithm in T<sub>E</sub>X82: For the 676 most common English words, hyphenation is 100% correct. And 89.7% of all English words are hyphenated correctly. So among the remaining 10% there must be a few words that might show up in a T<sub>E</sub>X file. The editor of *TUGboat* will be happy to keep a list.