

* * * * *

General Delivery

* * * * *

MESSAGE FROM THE PRESIDENT

Pierre MacKay

There is much to celebrate. \TeX "came of age" in December, and the \TeX book is out. Which leads to the first and most urgent of several messages, addressed to those members of TUG who may still be using $\text{P}\TeX$, TeX80 or one of their offspring. The message is, "STOP!" TeX80 is now an interesting piece of technological archaeology; it was a necessary step along the way, but it does not offer anything like the power of genuine \TeX , and it can never improve. Change now, and you will face a slightly painful but rather brief effort of macro conversion, rather like getting a tooth fixed. Be brave. Get it over with. You will be glad you did.

This leads to a second message. In the next year or so, we are likely to see the appearance of \TeX offspring. Some will be the enhancements that have deliberately been allowed for in the final modules of the TeX WEB file, and some may be more like HalfaTeX , PartaTeX , RathaTeX and HardliTeX . There may be good arguments for some of them, but there should be no arguments about the legitimacy of genuine versions of \TeX . The test of the real thing lies in a file called TRIP.TEX . When you run TRIP through your newly compiled \TeX , you get a very alarming set of diagnostic messages on the log file, and if that log file agrees with a master copy, then what you have is pretty sure to be \TeX . If the log files don't agree, watch out.

Similarly, all DVI interpreters ought to produce the same basic results at the same output resolution. The DVItyp program which is included in any distribution of \TeX sets the standard. If anything seems odd, it should be possible to try out various sizes of rule and space and see whether the results produced by DVItyp match the results you see on your laser-printer. The operation of high-resolution typesetters is rather less easy to check, but here it ought to be possible to check against the ideal measurements in the TeX source file. When you ask for a one-pica rule from a phototypesetter, you ought to get exactly that. When you try to do that on a low resolution printer, you can expect some fairly gross adjustments owing to rounding.

There is a fair amount of work still to be done with fonts, and perhaps the most significant news at this time is that METAFONT is being converted

from a SAIL program running in a very limited environment to a Pascal program which ought to run wherever \TeX can run. For the present, we are still dependent on the old METAFONT and some very interesting problems have surfaced from the need to generate low-resolution fonts in several closely related pixel densities. The general lesson is that in font design you have to take a great many factors into account, not the least of which is the interaction of ink and paper on the specific device you are designing for. It will never be enough just to take a high-resolution design and cut it down mechanically to low-resolution densities.

At the end of February, there was a lively exchange over the mail networks about the possibility of establishing some standards for the inclusion of graphics in \TeX . Several sites have already worked out protocols using the TeX special , and there was a widespread feeling that before we go too far in separate directions it would be a good idea to arrange for a department in TUGboat where the systematic use of special sequences could be worked out. We can probably wait to set this up until August, but meanwhile, if you are doing anything interesting with graphics and \TeX , send it on through one of the networks, or to Barbara Beeton at the AMS, or to me. And remember that we will need a volunteer to coordinate the new department, so, if you are feeling public-spirited, we need you.

Unfortunately, we are losing one of the most active and public-spirited members of TUG for now, though we hope very much that it is only for a short time. Lynne Price, who has been one of our chief guides through the early years of TUG, has written that she is moving to a place where, for the moment, she has no access to \TeX . The whole organization will miss her, and the Steering Committee will miss her especially. We will need someone else to take up her position as macro coordinator for TUGboat . Once again, do we have a volunteer?

To Lynne, for the present, we say "The very best of luck, and hurry back."

* * * * *

TeX INCUNABULA

by Donald E. Knuth

Several people have asked me for a list of the "first" books ever typeset by \TeX . Bibliophiles might some day enjoy tracing the early history of this particular method of book production; I have therefore tried to record the publications known to me, before my memory of those exciting moments fades