9. Origin of the macro (particularly helpful when macros are shipped off to other TEX sites).

The meeting wrapped up on Wednesday, with presentations made by Bart Childs to members of the TEX community who had made special contributions. Each received an appropriately inscribed plaque, and Barbara Beeton received an original Duane Bibby illustration. Wednesday also featured a talk by Alan Dyer on how the Maryland Bar Association has made TEX a voluntary standard for legal typesetting in Maryland. Barbara led the annual "TEX Question and Answer" session, and that was the "official" end of the meeting. Unofficially, some people stayed on for hours.

On Thursday and Friday, I attended Stephan Bechtolsheim's output routines course with about 15 other people. This was the first formal TEX course I'd ever taken, and I certainly hope to take another one in the future. Stephan's class notes are extremely helpful.

While most of the conference was spent attending meetings and the like, there were opportunities to meet TEX users from all over. Addison-Wesley sponsored a barbecue on Monday, and Personal TEX put on a wine and cheese party on Tuesday. Seattle has many ethnic restaurants, and a number of seafood restaurants on renovated piers near the downtown area.

My only regret from the week I spent in Seattle was that I was unable to take a trip to the mountains. Marie McPartland-Conn, who made the trip out to Mt. Saint Helens, described the destruction of the mountainside and the tons of dust still found in the area. She had the dirty car to prove the point!

My sight-seeing was pretty limited to watching the mountains from the back of the dorm, and a few trips to downtown Seattle. One night, I joined a group that went to Tillicum, a recreation of an Indian village on Burke Island in Seattle harbor. This spot featured an Indian-style salmon dinner, Indian dancing, and Indian crafts. Friday night, Marie, Doris Hsia (the other Knuth Scholarship winner), Michael Doob and I had one last ethnic meal and our last good look at downtown Seattle from the top of the Space Needle.

In my opinion, Dean Guenther, of Washington State University, Donna Gardner, of the University of Washington, Ray Goucher and Bart Childs all did an excellent job in pulling together the conference and the courses.

So, Ray, when do we get to go to Seattle again????????

From the Editor

Barbara Beeton

First of all, I'd like to thank the TUG hierarchy for the most delightful token of appreciation presented to me at the Seattle meeting. Those who weren't present can see it in a different context on page 56 of *The TEXbook*. The original drawing has been beautifully matted and framed, and was given to me accompanied by a brass plaque purporting to explain why I deserve it. I shall treasure them both.

I'd also like to report on some activity outside of TUG relating to an item that appeared in TUGboat. Chuck Bigelow's article, "Notes on typeface protection" (Vol. 7, No. 3), has now been reprinted in both English and French (translated by Jacques André, a "charter" TUG member, with the title "Du piratage de fontes" in *Technique et Science Informatiques*). I replied to a recent request to reprint this article yet again with an offer to provide the text on floppy disk. The response to my offer seems to me a backhanded comment on what I think TEX and TUG are all about:

> "I have asked our Production Department whether a copy of the article on IBM PC diskette would be useful, but they think it is preferable to go ahead with the traditional type-setting. Thank you, in any case, for the offer."

Under the circumstances, I shall let the source remain nameless.

Software

Proposed Minimum Standards for TEX Distributions

Bart Childs

We have an activity beginning for definition of a standard for drivers. A standard for TEX distributions will probably be harder in some sense because it has so many parts. The purpose of this is to create a start of a series of discussions that might lead to someone volunteering to lead such an effort.

I offer some thoughts here that I think are appropriate for inclusion (at least in part) for a minimum TEX distribution standard. Many of the thoughts are not original with me because I have

observed some of the other distributions for micros through mainframes. I also learned a lot from recent opportunities to watch someone else install TEX from my instructions.

I will not try to name directories here because they should vary greatly based on the restrictions of the operating system and other arbitrary restrictions. However, I will offer some suggestions on naming conventions of files that contain pixels.

Files That Contain Pixels

These files should be named in a convention that is not misleading! Some distributions use `dpi329` to indicate files for 300 pixels/inch (dpi, from dots/inch) at `\magstephalf`. I propose that: *One directory should contain all the pixel files for a given resolution and marking technology.* Thus, a directory of `pk_b300` would contain files for a **write black 300 dpi** engine. Extensions should be added for aspect ratios. The Computer Modern roman 10pt font should exist with several magnifications. Extensions need to reflect the magnification and storage protocol. I propose using `0pk`, `hpk`, ... `7pk` for the obvious zero, half, ... seven magnifications. The storage protocols should be `pk`, `px`, and `gf`. Are there others? The three-character extensions will enable use of these files on mainframes and minicomputers that act as servers for PC interconnect systems which are appearing. These files must obey MS-DOS restrictions.

TEX Source Distributions

TEX distributions on magnetic media that will hold 25Mbyte and above should always contain the sources that are on the standard distribution. Diskette distributions should have sources available in some form. Since many micros don't have sufficient storage for the sources, they should probably be kept separate and charged for separately. (Personal TEX has this available now.) I am not sure that we can expect the (proprietary?) change files to be included, but I would like that.

Formats

The standard formats should be included: plain TEX, LATEX, SLITEX, and AMS-TEX. Further, these should include locals like `\today`, `time` (giving `\thetime` and `\miltime`), or a facility for including them in a standard local.

We should expect users to create local or personal macros. We should also expect installations to begin using METAFONT for creating specialized fonts and logos. Thus, each distribution should include the means for rebuilding these formats.

Maintenance

Each distribution should have an explicit option for maintenance and provisions of updates. The regularity of these updates will be dependent on extras that might be furnished.

Evolution

The creation of standards for drivers will certainly cause some standard macros to be furnished for TEX that will specify how graphics is to be included. These items, along with the coming of color, duplex print engines, and other improvements in technology, indicate that many changes will be made.

I suggest the following handling for *invisible* fonts, as in SLITEX: *all fonts whose names begin with "i" shall be considered invisible. The procedure that creates the file name can remove the "i" from the actual file name and open the visible file thereby getting the correct dimensions.* Drivers can follow the same strategy and carry an extra variable for each font. If this variable indicates that the font is *invisible*, then the driver has to be changed only in the `set` and `put` routines. They would simply move rather than output inkless fonts.

Utilities

Each distribution should have a utility that converts pixel files from the other two(?) standard formats to the preferred distribution formats. Thus, our DG distribution should have `GFtoPK` and `PXtoPK`.

We should develop and distribute conversion packages for older formatting systems and common word processors into TEX and/or LATEX.

I think that we should have language specific (such as German, French, etc.) translators into plain ASCII. The ß and accents like those on page 135 of the TEXbook are frequently entered as one keystroke. Some editors have the capability of converting it to the TEX control sequences, but the utility would be handy too. (Is this part of Michael Ferguson's multilingual TEX?)

Finally, we should have utilities to aid in detecting brace mismatches, removing TEX commands and checking for spelling, and easier public table macros. Some of these exist, but are not in `WEB`.

Summary

I hope these issues start some discussion on what we should have in TEX distributions. I have not touched on other items like user interfaces, editor macros, and font substitution which I think are a little further into the future. Do we have any volunteers to study distributions and try to work on a standards document?