REPORT ON THE ANSI X3J6 MEETING

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Supported by TUG, I spent January 25–29 in Lancaster, Pennsylvania attending a meeting of the ANSI X3J6 Text Processing Language Standards Committee. The committee is defining a standard language with facilities for text editing, text formatting, and generalized markup. For text editing, the object is to identify basic editing functions and a macro facility so that an individual user can take a personal macro file from system to system and not need to learn a new editor for each computer. For text formatting, the object is to be able to produce readable output on different systems from a single source file. It is understood that line breaks, hyphenation, page breaks, and so on cannot be preserved across different facilities. The output devices considered include daisy-wheel printers, word-processing equipment, and high-resolution typesetters. Text markup refers to labelling elements of a document—titles, chapters, footnotes, etc. The goal for generalized markup is to itemize the elements needed for common types of documents, so that input for various document formatters could be automatically prepared from a source file containing the text to be formatted interspersed with markup codes. Thus, preprocessors might exist to translate source files from the standard markup language to TeX input form, to SCRIBE input form, to APS-5 input form, etc.

Of the fifteen individuals in Lancaster, approximately half were committee members (to join, an individual must attend two meetings and pay $100). This attendance is fairly typical, although the mailing list has about sixty names. The committee has been meeting four times a year, for week-long sessions. The next meetings are scheduled for Phoenix in April, Edmonton in August, New Hampshire in October, and the Bay Area in January or February. If the current schedule, which calls for completion of the standard in 1983, can be met, only three meetings will be required next year. Once the standard is approved, the committee will continue to have short meetings once or twice a year; activity will then increase as the five-year review approaches.

I can forward a copy of the not-yet-completed draft standard (dated just before the Lancaster meeting) to any interested TUG member. The X3J6 formatting language has been greatly influenced by the concepts of boxes and glue as used by TeX. It is currently assumed that it will be easy to translate, in both directions, between the eventual standard language and TeX. Several committee members also belong to TUG. However, none of the X3J6 members in Lancaster yet has access to TeX. As a TeX user, I was repeatedly able to contribute to the discussion. During the week, topics pertinent to formatting ranged over paragraph justification, word spacing, letter spacing, line spacing, leaders, rules, and page layout. I learned quite a bit about typesetting. Subtopics I found most interesting involved generalizations of structures and algorithms used by TeX.

It is very clear that X3J6 can benefit from involvement by TUG. There are advantages to the TeX community as well. X3J6 is formed of individuals knowledgeable in both typesetting and automatic text processing. Until the TeX language stabilizes, X3J6 can comment on its applicability to general, non-mathematical typesetting. There has always been interest within TUG in a possible "Son of TeX"; X3J6 may be an outlet for future generalizations. Finally, X3J6 and TUG have a common interest in separating font sales from sales of typesetting equipment. For the above reasons, I recommend that TUG continue to finance a representative at X3J6 meetings. Although we granted the Finance Committee authority to make this decision in Cincinnati, we can all provide input to the process through TUGboat, mail, and telephone.

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Software

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FIXED-POINT GLUE SETTING
AN EXAMPLE OF WEB
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The "definitive" version of TeX is being written in a new language called WEB, which is a mixture of TeX and PASCAL. I will soon be publishing a complete manual about WEB, but in the meantime I think it will be useful to have an example of a fairly short piece of code written in "web" form. Therefore I have prepared the accompanying program, which also serves another function: It illustrates how to remove the last vestiges of floating-point arithmetic from the new TeX.

The eleven pages that follow this introduction contain the example program in its "woven" form, including the table of contents and the two indices that are generated automatically. I hope the reader can guess how WEB works just by looking at this particular example. The PASCAL version of the TeX