## **General Delivery**

## MESSAGE FROM THE PRESIDENT

Pierre MacKay

In the past few weeks there has been a great deal of excitement over the announcements of new printer systems and software, and some of these announcements may provide the TEX Users Group with an even clearer role in the solution of one of the most difficult problems we have continually faced—the relation between public domain and proprietary software in a TEX-based document production system.

One of the most remarkable things about TFX is its absolute character as public domain software. This character is the result of Don Knuth's personal decision, and of the general organization of the site coordinators distribution system. The principal distributions of TEX are subject to no licensing restrictions other than those which inhere in the basic target operating system in which they run. If you have a computer at all, you probably have an operating system for it, and that operating system is certain to be protected by some sort of licensing agreement. The existence of public domain distributions of TFX does not preclude the development of other versions with better bells and whistles which may be tied to further licensing restrictions. For example, within the UNIX environment there are at least two compilations of TFX (same TFX, but different binaries) which depend on the use of specially licensed Pascal compilers. Each of these compilations offers significant advantages over the public domain compilation, and any establishment which happens to have access to the compilers may well want to consider reducing the load on its general computing resources by using a tighter and more efficient binary executable file. The majority of academic users, however, will continue to need the slower, public domain version; first, because special licensing inhibits experimentation, and second because many cannot afford anything but public domain software. The heart of the TUG effort must continue to be public domain distributions.

The most serious difficulties in this regard have always come at the output end of TEX systems, and recent developments could make the situation worse, or make it a great deal better. In a few months' time, METAFONT will come of age and will, like TEX, be made available through the same public

domain distributions as TEX. But what machines will it address, and under what restrictions?

This is a very delicate problem. The protection of font designs and font generation software is essential for the very survival of any manufacturer of typesetting equipment. It is entirely reasonable that the producers of such equipment should guard and protect their proprietary interest in machinespecific elements of their product. Such protection is fundamentally analogous to the licensing control over basic operating systems in general purpose computers, and does not, in itself, seriously restrict the user. Any user who can afford the machine can afford the essential proprietary operating system What the TUG community that goes with it. will need is not access to that, but rather to some kind of open interface which will support the public domain features of METAFONT and will make experimentation possible. Such an interface is not at all impossible, and it appears that we have a real hope that it will be provided, for example, in the case of the new PostScript system. The same thing could be done for most, and probably for all digital phototypesetters, in such a way as to retain and enhance the public domain features of META-FONT while also preserving the manufacturer's vital interest in the security of proprietary software.

## ANSI X3V1.8 LIAISON REPORT TO THE TEX USERS GROUP

Lawrence A. Beck

This is my first report to TUG as X3V1.8 liaison and I will try to make it as informative as possible. Just a word about the name change—we used to be X3J6, but as you will see, there has been a reorganization.

I'd like to start with a word about my responsibilities within ANSI and ISO. I've been involved with what was formerly known as ANSI X3J6 and with its ISO counterpart TC97/SC5/WG12 since early 1982. I am currently the Vice Chair of X3V1.8 and Secretary of the Task Group that is charged with developing SGML, X3V1.8.1.

There has been much activity since Lynne Price last reported to you in the September 1983 TUGboat. I'll discuss the administrative changes first.

During 1984, both ISO TC97 and ANSI X3 reorganized and consolidated their Subcommittees and Technical Advisory Groups. This was done for two reasons:

- to take into account converging technologies, and
- 2. to cut down on the administrative overhead caused by having many small separate groups. Within ISO we started out as part of TC97/SC5 (Information Processing Systems/Programming Languages). The TC97 reorganization put us into SC18—Office Systems, which was then renamed Text & Office Systems. TC97/SC5/WG12 became TC97/SC18/WG8.

Since ANSI X3 tries to mirror the organization of ISO TC97, X3J6 was merged into X3V1, also called Office Systems, which was then renamed Text: Office & Publishing Systems. X3J6 became X3V1.8 and was named Text Processing Languages.

Also, Mr. Charles D. Card who was the ANSI Chair and the ISO Convenor resigned both positions and was replaced by William W. Davis, Jr., of the U.S. Internal Revenue Service as ANSI Chair and William W. Tunnicliffe of the Graphic Communications Association as the ISO Convenor.

Within the area of technical development, we have continued refinement of the standard and have released Working Drafts 6–9. In August of 1983, Part 6 of the Standard (Document Markup Metalanguage—SGML) was released as a GCA Standard and adopted for trial use by the United States Department of Defense.

In September 1983, Parts 1, 2, 3, 5 and 6 were submitted to ISO for ballot to be considered "Draft Proposed". The ballot failed as most member bodies did not feel that Part 3 (Programming Language) was in any shape to be a standard, and, in addition, some members did not see a need for a new programming language.

Part 3 is now being re-evaluated and will probably be drafted as a set of general language extensions that could be used to make any block structured programming language more friendly to text.

In November 1984, ISO issued ballots covering Parts 2, 5 and 6 of the Standard (Glossary, Formatting Functions, and SGML) which asked the member bodies for authority to issue these parts as a Draft Proposed Standard. We have every expectation that this ballot will succeed.

As the ISO adoption process moves along, we expect that SGML (Standard Generalized Markup Language) will become very widely used as the method for interchanging documents. It provides

a coherent and unambiguous syntax for describing whatever a user chooses to identify within a document. Projects have already begun, especially in Europe, to develop SGML parsers, including one being done by SOBEMAP in Brussels as part of the "ESPRIT" program.

We believe that as the use of SGML grows, various vendors will find it in their interest either to develop SGML front ends to existing text processing systems, or, as has been done in some cases, to develop new integrated systems based on SGML principles. We hope that TUG will become a willing partner in these efforts.

## ACKNOWLEDGMENT OF CONTRIBUTIONS

The Officers and Steering Committee gratefully acknowledge receipt of royalties and other contributions to TUG from several sources:

- 1. From the sale of Don Knuth's *TEXbook*, royalties of \$3,268, with at least \$7,000 more still to come.
- 2. From David Kellerman and Barry Smith, of Kellerman & Smith, distributors of the VAX/VMS version of the WEB sources, along with some related proprietary software (output drivers, etc.), royalties of \$1,425. They incorporated \$25 into the price of every copy as a royalty to be transferred to TUG for "continued support of projects of interest to the TeX community"; Barry said they hoped this would "establish a tradition".
- More than 600 copies of Arthur Samuel's First Grade TEX sold by TUG in 1984 resulted in the addition of \$5,500 to TUG's treasury.
- 4. A contribution of \$500 received from David Rodgers on behalf of Textset, Inc.

TUG sincerely appreciates these very generous contributions.

Samuel B. Whidden, Treasurer

First principles of typographic design for document production (TUGboat, Vol. 5, No. 2, pp. 79–90): Corrigenda

Richard Southall

Page 83. lines 6 ff.:

What happens in text?

Written language contains elements that are not alphabetic or numeric characters: punctuation signs, and space. It also has features that seem to operate at a higher level than the words of the text: capitalization, changes in type style and size, and the presence of vertical and horizontal space in varying amounts. These elements and features evidently have some part to play in written language, and some (but surprisingly few) attempts have been made to identify their functions (Mountford, 1980; Walker, 1979; Walker, 1983). The following list of functions is taken from Walker's thesis:

Distinction

particularization (including emphasis) quotation interpolation

Abbreviation

Introduction

Omission

Separation and connection

Presentation of numbers

The most significant of these functions seems to be that of distinction/particularization.

References

Page 89, lines 20-22:

Walker, S.F.

Descriptive techniques for studying verbal graphic language Unpublished thesis: Department of Typography & Graphic Communication, University of Reading, England (1983)