

***T_EX* and TUG NEWS**

Mission Statement

The T_EX Users Group (TUG) provides leadership:

1. to encourage and expand the use of T_EX, METAFONT, and related systems
2. to ensure the integrity and portability of T_EX, METAFONT, and related systems
3. to foster innovation in high-quality electronic document preparation

T_EX and TUG NEWS is a newsletter for T_EX and L^AT_EX users alike: *a forum for exchanging information, tips and suggestions; a regular means of communicating news items to one another; a place where information about T_EX and TUG can be quickly disseminated.*

Throughout the newsletter “T_EX” is understood to mean T_EX, L^AT_EX, $\mathcal{A}\mathcal{M}\mathcal{S}$ -T_EX, and other related programs and macros. *T_EX* and TUG NEWS is produced with the standard L^AT_EX distribution, and is to be as portable a document as possible.

The entire contents of this newsletter are being placed in the public domain. The source file of this issue will be placed in the **aston**, **shsu**, and **stuttgart** archives, as well as at the **heidelberg**, **labrea**, and **ymir** archives. Copying and reprinting are encouraged; however, an acknowledgement specifying *T_EX* and TUG NEWS as the source would be appreciated.

Submissions to *T_EX* and TUG NEWS should be short, the macros must work, and the files **must** run without special font or graphics requirements: this is to be a *portable* newsletter (the new font naming scheme has not yet been implemented). Correspondence may be sent via e-mail to **tug@math.ams.com** with the subject line NEWSLETTER. Regular mail should be addressed to the Publications Committee, c/o TUG Office at the address below.

T_EX Users Group	Phone: 401-751-7760
P.O. Box 9506	FAX: 401-751-1071
Providence, RI 02940-9506 USA	E-mail: tug@math.ams.com

T_EX is a trademark of the American Mathematical Society

Editorial

Welcome to the second issue of *T_EX and TUG NEWS*. With each issue, I hope you'll find more of what you're looking for. If not — send something in yourself!

Our feature article, “T_EX in Japan”, is almost a roundup of the various approaches being followed to make T_EX work in the Japanese environment. The list of publications now available to the Japanese user of T_EX is also quite impressive.

The “Typographer's Inn” with Peter Flynn is back, with some interesting comments and suggestions following up on his first column. Peter has also created a few new lists for you to subscribe to — in case you don't have enough to read and keep track of!

Good news to report on the books listed in the last issue — reviews of Becari, Eijkhout, and Hahn will all be appearing in *TUGboat* 13 #2, while the Seroul/Levy book was reviewed in 13 #1 (pp. 57–58). There's a new subsection in “New Publications”, where I hope to list the latest issues of newsletters from other T_EX user groups. If you know of any others, do let me know.

The regular columns on T_EX and L^AT_EX tricks, (L^A)T_EX news, and news on happenings in other user groups are all here again.

A note of interest: a TUG member, Mr. Robert Otness, asked me for TTN's .sty file to use as a base for his own newsletter. Well, the first issue of the *Journal of the Oughtred Society*¹ finally arrived, also done in L^AT_EX. Congratulations to Mr. Otness on his newsletter — welcome to the editors' club! Actually, once the TTN macros have settled down, we'll probably have a brief write-up on them.

And in other news: the 1992 Knuth Scholarship has been awarded to ... well, you'll just have to come to TUG'92 to find out who! So, get ready to come to Portland and enjoy yourselves at the end of July — lots of fun and games, interesting talks and panels and workshops, courses to take, and when you've had your fill of the meeting, there's still all of Portland and the local area to explore.

Have a pleasant and relaxing summer, and if I don't see you at the Portland meeting, we'll meet again in the September/October issue of *T_EX and TUG NEWS*.

Christina Thiele
Editor, *T_EX and TUG NEWS*

¹“... a newsletter for people interested in the history and collection of slide rules.”

L^AT_EX3, TUG, and You

My goal for this article is to introduce myself to TUG members as the liaison for the L^AT_EX3 project and *particularly* to invite their participation.¹

My own involvement with the technical aspects of the project is peripheral at best. The TUG Board of Directors has begun implementing a policy whereby we identify and attempt to expedite the work of worthy T_EX projects by whatever means in our power. To that end, liaison personnel have been appointed to approach project leaders to see if the project would like to team up with the liaison. The connection can be as active or passive as an individual project deems appropriate.

While there has been no effort to quantify the concept of “worthy T_EX project,” it seems clear that the L^AT_EX3 project qualifies by any standard, and I was asked to serve in the liaison capacity. Please feel free to contact me with any questions, comments, thoughts, or donations pertaining to L^AT_EX3. (You can reach me by mail at 17 Bay Avenue, Huntington, NY 11743, USA or on Bitnet at ajhjj@cunyvm, and I do hope to hear from you.)

The L^AT_EX3 project: some background

The 1989 TUG meeting at Stanford saw the birth of this project. As a result of many late-night discussions, Leslie Lamport (author of the current version of L^AT_EX) and Frank Mittelbach (now the Technical Director of the L^AT_EX3 project) determined a strategy for rewriting the L^AT_EX macros. The L^AT_EX3 project will produce a public domain document preparation system which combines the power and excellence of T_EX’s typesetting capabilities with ease of use for authors, editors, and designers. The guiding principle for the original L^AT_EX continues: generic document mark-up is to be separate from the visual formatting of the document. (For example, you indicate that a certain paragraph is the abstract, and let L^AT_EX worry about what the abstract part of your paper looks like.)

The major difference in the new version will be the addition of a workable, simple interface through which designers can specify how classes of documents should look. It will also contain many detailed enhancements and extensions to cover wider classes of documents. The code will be designed and documented in a way that makes future maintenance and extensions straightforward.

The project team will produce full documentation of all parts of the system. If you use L^AT_EX now, you will be glad to learn that you will have access to a variety of tools for easily upgrading your existing documents to the new system.

¹[First report appeared in *T_EX and TUG NEWS* 1(1):4-6.]

The project team is committed to making sure that the TUG and T_EX community remains fully informed about the progress and status of the work. (That is one of the duties of the liaison.)

About a half-dozen modules which extend the functionality of L^AT_EX2.09 have been produced over the last few years. These are also intended to test possible concepts for the new version. The modules include a new font selection scheme (NFSS), robust multicolumn and verbatim environments, an extended tabular environment and a new theorem environment. While L^AT_EX3 will be written from scratch and not by just adding features piecemeal to the old implementation, these modules will provide you with a chance to use features which will be available in the same or similar form in the new product.

The easiest way to get these modules (each of which includes documentation on installation and use) is from someone who already has them. Otherwise, they may be downloaded from all major software archives. (Unfortunately, this route is open almost exclusively to those with access to the various computer networks that encircle the globe. Consult the 1991 *TUG Resource Directory* for information on access to these archives and how to download from them.)

Project personnel

The core of the L^AT_EX3 project team is gratifyingly international. The Technical Director is Frank Mittelbach (Germany) and the team's activities are co-managed by Chris Rowley (United Kingdom) and Rainer Schöpf (Germany). Other members come from Germany, France, Denmark, Canada, the Netherlands, the United Kingdom and the United States.

How you can help

As always, concrete support in the form of money leads the list of things needed. The team works hard and steals time from family, friends, and real-life employers in order to work on the new L^AT_EX. Team members are humble, frugal souls, but every so often the key members must travel to meet together to discuss their next set of goals, and so on.

To that end, a L^AT_EX3 Fund has been set up, to be administered by TUG. As of this writing (early June), the fund contains about US\$3,000. In addition to meeting travel expenses, it will be used for essential hardware upgrades and whatever else is essential for the progress of the project.

Your contribution to this worthy effort is earnestly solicited. In fact, if you looked closely at your TUG renewal form, you may have noticed an item on the form for the fund. If you have not done so, please give serious thought to making a contribution.

Of course, contributions in the form of state-of-the-art computer hardware will also be greatly appreciated.

The list of corporate and educational institutions which have supported the project in various ways is long and noble — to date it includes: Addison-Wesley, American Mathematical Society, ArborText, Aston University, Blue Sky Research, DANTE Deutschsprachige Anwendervereinigung T_EX e.V., Digital Equipment Corporation, EDS Electronic Data Systems, Elsevier Science Publishers, GUTenberg, NTG Nederlandstalige T_EX Gebruikersgroep, Nordic T_EX Users Group, Open University, PCT_EX, Royal Institute of Technology Stockholm, Royal Military College of Science, Southampton University, T_EX Users Group, T_EX88, T_EXpert Systems, UK T_EX Users Group, Universitätsrechenzentrum Heidelberg, Universitätsrechenzentrum Mainz.

If you are unable to make hard cash donations, you can still make contributions in the form of new ideas and critical feedback. Please subscribe to the electronic list L^AT_EX-L and make your voice heard! To subscribe, you need access to one of the academic networks. Mail a message containing this line:

SUBSCRIBE L^AT_EX-L Your-first-name Your-surname

to LISTSERV@vm.urz.uni-heidelberg.de.

Thanks for thinking of us, and we look forward to hearing from you.

Alan Hoenig
L^AT_EX3 Liaison

Note and Correction

<p>In <i>TUGboat</i> 13(1):96–101, there is a detailed discussion of the L^AT_EX3 project by Frank Mittelbach and Chris Rowley. On p. 100, an old address for the L^AT_EX-L list was published inadvertently. As indicated in the above article, the preferred address is LISTSERV@vm.urz.uni-heidelberg.de – Ed.</p>
--

Did you know ... ?

<p>... that back issues of <i>TUGboat</i> are available to members for a big discount? See the yellow order form in the back of <i>TUGboat</i> 13(1) for details on these and other savings.</p>
--

Update on T_EX in Japan

Introduction

Unlike the English alphabet (which is made up of phonograms), many Japanese characters are ideograms; that is, they are symbols representing things or ideas. This means that Japanese has many more characters than European languages.

There have been various efforts made to develop a version of T_EX which could treat Japanese characters. Several articles about the process and results have appeared in *TUGboat* over the past few years.¹ A number of books have now been published using T_EX, so it seems that there are indeed practical applications for T_EX in Japan.

This report will describe the current Japanese version of T_EX and the circumstances surrounding it. The first point to make is that a Japanese version of T_EX can only work under an operating system that has been “Japanized”. That is, the problems of inputting Japanese characters and working with an editor which can treat Japanese have been resolved in the operating system.

A Japanese version of T_EX

At present, there are 6,353 kanji characters available on various types of computers. These characters are defined as JIS levels 1 or 2.¹ Incidentally, we Japanese must learn 1,945 characters at school by age fifteen.

Two-byte code is used to represent the more than 6,000 characters on our computers. One-byte code English words are mixed in the same sentence at times with the two-byte code. That is, a Japanese document may have both 8-bit and 16-bit code. T_EX, as you know, is designed to operate with one-byte code, so we cannot use two-byte code with T_EX in its original condition. Another limitation is that no more than 256 characters can be used within one font set.

To make a Japanese version of T_EX, we must manage to use over 6,000 Japanese characters in the same way as when we use the original T_EX. Of course, we have to keep in mind upward compatibility with both the source level and the manipulation level.

Two approaches have been used to solve these problems of Japanizing T_EX. Each has its merits and demerits, and each has gained ground.

¹[See, for example, N. Saito and Kitagawa (1988), Y. Saito (1988), Kitagawa and N. Saito (1988), Hamano (1990), Miyabe et al (1990), Kakiuchi et al (1991).]

¹JIS stands for Japan Industrial Standard; consider it as akin to ASCII in the United States. See also Beebe (1990).

NTT jT_EX

One of those approaches is called NTT jT_EX, developed by Yasuki Saito of Nippon Telephone & Telegraph (NTT).

The basic principle used by Saito was to keep changes and deviations from the original T_EX to a minimum. He divided the Japanese font into groups comprising fewer than 256 characters and explicit “real Japanese characters”, using only one-byte code. For more details, see Y. Saito (1987).

Some of the advantages and disadvantages include:

- Comparatively few changes:
It can use the original format of T_EX font files and the printer drivers. There is no need to change T_EX itself if Japanese characters are converted into the subfont (one-byte + character code).
- Limited typeface styles:
T_EX can only handle 256 fonts at a time; as well, it considers each font size to be a completely different font. When we divide kanji into fewer than 256 characters, one kanji font corresponds to scores of T_EX fonts. This means that font availability is severely limited. (However, this isn't a major problem because ordinarily people usually use only 2 kinds of font sets.)
- Inconsistency of fonts:
Because each font is divided into plural parts, even though it should be essentially one, we cannot use functions such as kerning which are supported only in the same font.

The latest version of NTT jT_EX is 1.06, based on T_EX 2.95. At present, NTT jT_EX is confirmed as running on UNIX, VAX/VMS, DOS, and various mainframes. These are all distributed as public domain software.

The original printer drivers for T_EX can be used with no changes. However, it is necessary to use printer-resident Japanese fonts such as are available for PostScript printers, or one has to get the commercial font for NTT jT_EX.

ASCII Japanese T_EX

Another approach to the problem is demonstrated in the ASCII Corporation's Japanese T_EX. ASCII publishes computer books and magazines and develops software especially for UNIX. ASCII Japanese T_EX was developed by the corporation's software development section, and its publishing section has put it to practical use.

The underlying principle in ASCII Japanese T_EX is to have a unified operation for Japanese; that is, T_EX can operate on one-byte code and two-byte code in the same way. In order to do this, ASCII enhanced the `tfm` files as well as T_EX

itself. It uses one kanji font set, including the more than 6,000 characters as just one font. (The change file contains about 7,000 lines.)

The result is that it doesn't have 100% compatibility with the internal operation of the original T_EX, and the following portions cannot pass the `trip` test:

1. section of the messages have been changed in order to cope with Japanese
2. conditions of memory use

However, the output made from the file, which contains only one-byte code, is the same as if made by the original T_EX. And under these conditions, we can use original macros without changes. For example, if we get only the macro file of `AΛS-TEX`, we can easily make a Japanized version of it.

ASCII Japanese T_EX has the following merits and demerits:

- Extensive revision work to do:
Not only must T_EX itself be Japanized, but also the various related file formats and utility programs have to be reworked.
- No limit to fonts used:
One font includes all the Japanese characters. So we can use up to 256 fonts including Western characters and Japanese characters. NTT `jTEX` cannot treat so many fonts because it divides a Japanese font into a lot of T_EX fonts. ASCII Japanese T_EX, on the other hand treats one Japanese font as one T_EX font. Practically, we can use the same kinds of fonts as the original T_EX, at the same time.
- Able to supplement functions at will:
To typeset Japanese documents beautifully, ASCII supplements some primitives.

The most notable special feature is the number of fonts which can be used at the same time. In fact, some printing houses print with more than 20 different Japanese font sets, using the resident fonts of the typesetter.

The latest version of ASCII Japanese T_EX is 1.60, based on T_EX 2.99. It is currently running on UNIX, DOS and various mainframes; the UNIX version is available via anonymous ftp from `ftp.ascii.co.jp(133.152.32.11)`.

The distribution includes the following printer drivers: Canon LBP8, Laser-Shot, Imagen, PostScript printers (`dvi2ps`), Sony News, and X11 previewer.

Most of these drivers use the printer's resident Japanese fonts. In distribution, you can also get `tfm` files for point sizes 5 through 10 of the two standard kinds of Japanese typefaces. These `tfm` files are based on the fonts presented by the DaiNippon Printing Co., but there is almost no problem using printer-resident Japanese fonts.

The utilities `MakeIndex` and `BIBTEX` are also available with Japanized T_EX.

p T_EX

Japanese sentences can be written in two ways, horizontally or vertically. Scientific documents are usually written as horizontal text. Novels and magazines are usually written as vertical text.

Both NTT jT_EX and ASCII Japanese T_EX support only horizontal text because T_EX is usually used in scientific environments.

ASCII has devised a version of T_EX which can produce vertical text, in order to use it in general publishing. They call it “p T_EX” (for “publishing T_EX”), which supports vertical typesetting. Since p T_EX is an extended version of ASCII Japanese T_EX, it also supports horizontal typesetting. Hamano (1990) provides more information on the development of p T_EX.

p T_EX for the UNIX environment is included in the ASCII Japanese T_EX distribution, available via anonymous ftp from the same address given above.

T_EX applications in Japan

In Japan as elsewhere, T_EX is used mainly in the academic environment: people use it to write theses, reports, and letters. Some write their course books and computer operations guidebook with T_EX or L^AT_EX. Furthermore, I hear some colleges provide lectures on T_EX and L^AT_EX.

In offices, T_EX is used for personal correspondence, reports, letters, and so on. Some offices use T_EX or L^AT_EX for writing technical computer documents with limited circulation, mainly because of lower costs.

Some ten publishing companies in Japan are bringing out publications produced with T_EX. ASCII Corporation has published 80 titles, including thirteen which are typeset vertically. They have also been marked up with SGML.

I believe the Kyoritsu Publishing Company has brought out seven titles; Iwanami has brought out three books, and a few scientific publishing companies are using T_EX. Journals from the Japan Society for Software Science and Technology, the Japan Society of Information and Knowledge, and so on are also using T_EX.

Connections between users

Most people who can access networks are able to get information from groups such as `comp.text.tex`, FAQ lists, etc. There is also a newsgroup called `fj.comp.texhax`, where questions can be posted in Japanese. In fact, I collected some information for this report by posting a message.

Members of the T_EX Users Group get *TUGboat*, which is important.

Those who live in the Tokyo area can attend meetings of the Japan T_EX Users Group, which are held twice a year. Proceedings from the meetings are distributed by JTUG.

I was not able to collect information about other T_EX users who don't have network access, or are not members of TUG. I think these people probably get some of their information about T_EX from computer magazines.

Japanese T_EX Users Group

The Japanese T_EX Users Group is a special interest group of the Japan Society for Software Science and Technology. The president is Prof. Saito, Keio University.

Membership in JTUG is free, and all members are volunteers. Meetings are held twice a year, either at a college or the seminar room of a company near Tokyo. At the meetings, we usually have a few presentations, seminars, announcements, lectures, and so on. There are about 500 members in JTUG, and more than 100 members attend each meeting.

Books on T_EX

Finally, I've gathered together a list of books on T_EX that have now been published:

- Buerger, David J. *L^AT_EX for Engineers & Scientists*. Tokyo: McGraw-Hill, 1992. ISBN 4-89501-442-8.
This is a translation of Buerger's book.
- Knuth, Donald E. *T_EXbook*. Tokyo: ASCII Corporation, 1989. ISBN 4-7561-0010-4.
This is a translation of *The T_EXbook* into Japanese. There is an additional Appendix K, where the Japanizing of T_EX and the status of T_EX in Japan are described.
- Lamport, Leslie. *L^AT_EX: A Document Preparation System*. Tokyo: ASCII Corporation, 1990. ISBN 4-7561-0784-2.
This is a translation of the L^AT_EX manual into Japanese.
- *Introduction to T_EX*. Tokyo: Kyoritsu Publishing Co., 1989. ISBN 4-320-02488-5.
This is a book edited from a series of articles which have appeared in "bit" magazine. Many famous T_EX people have written items introducing T_EX, L^AT_EX, and METAFONT, as well as some utilities.
- *Japanese T_EX Technical Book I*, Tokyo: ASCII Corporation, 1990. ISBN 4-7561-0405-3.
This describes how the Japanese version of T_EX was developed at ASCII Corporation and about some drivers.

- Nodera, Takashi. *Easy-Going L^AT_EX*. Tokyo: Kyoritsu Publishing Co., 1990. ISBN 4-320-02519-9.
This is an easy-to-understand guidebook to L^AT_EX.
- Nodera, Takashi. *more³ A_MS-T_EX*. Tokyo: Kyoritsu Publishing Co., 1991. ISBN 4-320-02538-5.
This publication explains how to use A_MS-T_EX.
- Nodera, Takashi. *Just Do It, A_MS-L^AT_EX*. Tokyo: Kyoritsu Publishing Co., 1991. ISBN 4-320-02564-4.
This publication explains how to use A_MS-L^AT_EX.
- Okumura, Haruhiko. *L^AT_EX, an introduction of aesthetical document preparation system*. Tokyo: Gijutsu-Hyoron Publishing Co., 1991. ISBN 4-87408-469-9.
This book explains how to install and use L^AT_EX on personal computers. It also includes the introduction of several versions of T_EX in Japan.
- Samuel, Arthur L. *First Grade T_EX: A Beginner's T_EX Manual*. Prof. Yoshio Ohno, trans. Tokyo: Kinokuniya, 1989. ISBN 4-314-10018-4.
This is a translation of A. Samuel's book from Stanford University.

Bibliography

- Beebe, Nelson. "Character Set Encoding." *TUGboat* 11(2):171–175, 1990.
- Hamano, Hisato. "Vertical Typesetting with T_EX." *TUGboat* 11(3):346–352, 1990.
- Kakiuchi, Takashi, Yuki Kusumi, Yoshiyuki Miyabe and Kazu Tsuga. "A Structured Document Preparation System — *Autolayout* version 2.0 — An Enhancement for Handling Multiple Document Types." *TUGboat* 12(3):422–429, 1991.
- Kitagawa Kazuhiro and Nobuo Saito. "Mathematics Textbook Publishing with Japanese T_EX." *T_EXniques* 7:165–170, 1988.
- Miyabe, Yoshiyuki, H. Ohta, and K. Tsuga. "Structured Document Preparation System *AutoLayout*." *TUGboat* 11(3):353–358, 1990.
- Saito, Nobuo and Kazuhiro Kitagawa. "What Should We Do for Japanese T_EX?" *T_EXniques* 5:53–56, 1988a.
- Saito, Yasuki. "Report on jT_EX: A Japanese T_EX." *TUGboat* 8(2):103–116, 1987.
- . "jT_EX." *T_EXniques* 5:57–68, 1988.

Harumi Fujiura
Business Software Division
ASCII Corporation
Tokyo, Japan

Typographer's Inn

A large and interesting emailbag resulted from February's column, so I make no apology for concentrating here on the points which people raised.

Important stuff first: the "significant typographic change" in February's column was the use of small caps for T_EX and L^AT_EX. First off the mark were two honest typographers who had sight of TTN before it was mailed out to the world, and who thus excluded themselves from competition. They were closely followed by Jim Fox from the University of Washington, who spotted the reduced size but missed the face being small caps. The first completely correct public reply was from Timothy Larkin at Cornell. However, as I'm feeling generous, both Jim and Tim can claim a beer from me in Portland.

Almost all the messages about this said they thought it was an improvement to use small caps this way. Our editor, Christina Thiele, says she prefers using 9pt roman caps rather than the 10pt small caps font for acronyms and the like. Has anyone else experimented with this kind of variation?

People also commented on the use of oldstyle numerals: this is a personal quirk, and I feel that the small caps font of a face like Computer Modern should contain oldstyle numerals. One reader asked if the typewriter typeface small caps in `cmccsc10` should be used for acronyms when using `tt`. I'm not sure about this, but judge for yourselves below. (This was Tom Reid from Texas A&M — the absence of an acceptable small ampersand in `cmccsc10` precludes that common abbreviation being set as A&M!)

A few people spotted the deliberate intrusive apostrophe, the use of an en-rule in 'ftp-accessible', and the distinction between single quotes for citation and double quotes for quotation. The lighter color of ink, however, was not deliberate, but a machining fault. Several people also liked the use of punctuation after closing quotes where the punctuation is not a part of the quotation itself. I have preferred this ever since I argued with my English teacher in high school about it, and it's been a pet perversion ever since.

As promised, I have set up a new list, `TYPO-L`, on `listserv@irlearn.ucd.ie`. To subscribe, send a one-line mail saying `sub typo-l <forename> <surname>` (users on BITNET itself can address it interactively without the `ucd.ie`). Nelson Beebe remarked that of the current 1600 or so newsgroups carried by Usenet news, neither of the strings 'typo' or 'dtp' occurs in any of the newsgroup names. When I get better news access shortly, I might look at starting something, although many news hosts now replicate BITNET lists in the `bit.listserv` hierarchy. Bernard Gaulle asked how a discussion of French (or indeed any other non-English typography) might be carried on using English as the medium of information exchange: any suggestions?

Thank you to all those who sent in bibliographies of books on typography. I will shortly be sending these out on the `TYPO-L` list, so they can also be retrieved from the logs kept by `listserv` in the normal way. I will also put them on `curia.ucc.ie` for `ftp` access in `pub/typography/biblio.*` (Karl Berry reminds me that “Nelson Beebe maintains a huge collection of `.bib` files on `math.utah.edu`, in `pub/tex/bib`”).

Which brings me to an apology to Karl for omitting to mention his `eplain` macros, which do substantially what I was seeking: \LaTeX -like text management without \LaTeX -like pre-emptive design. I’ve started to use them (and pester Karl for extra things) and I think they are extremely useful. Thanks to William McKeehan of Tennessee for pointing this out.

Chris Carruthers asked for some more specifics on how to critique DTP systems (“surely they get the baselines straight at least?”). Alas they don’t: you probably have noticed the infamous bug in PageMaker which gives more leading between lines 1 and 2 of a paragraph than between the second and subsequent lines. He also mentions some other horrors: quoted text where the open quote appears as a close quote; italic typefaces (especially in large sizes) where the ‘*fi*’ ligature (if any) is not used and the ‘*f*’ then collides with the ‘*i*’; similarly an italic ‘*f*’ followed by a roman colon; uneven spacing between words on the same line of type; the use of bold and italics for emphasis — in the same paragraph (“oops . . . that was in the last issue of TTN” he says: can you spot it?).

Finally, a question of style which arose recently. I’ve just finished typesetting a draft of “The Ladies’ Defence” by Mary, Lady Chudleigh, which was first published in 1701, for which I used an SGML text provided by Elaine Brennan of the Women Writers Project (WWP) at Brown University. An unresolved question is whether or not a modern working edition for scholars should attempt to reproduce the nuances and flavor of what is essentially a seventeenth-century work (despite the publication date). I am not trying to make a typographic facsimile — that would be a specialised task for antiquarians — but I felt that making a modern paperback edition (narrow margins, Times Roman 9/10pt and little visual interest) would be at odds with the lively style of writing and the vagaries of setting which are manifest in the original. The WWP is doing excellent work in making authoritative copies of otherwise unobtainable texts by women writers, using SGML markup to preserve the detail of the originals, and it seemed logical to take advantage of this where it existed. Perhaps those who are interested in commenting on this could look it over: the results are on `curia.ucc.ie` in `pub/tex/defence.dvi` .

Peter Flynn
University College Cork
`cbts8001@iruccvax.ucc.ie`

New Publications

André Heck, ed. *Desktop Publishing in Astronomy and Space Sciences*. Singapore: World Scientific Publishing Co. Pte. Ltd., 1992. xi + 240 pp. ISBN 981-02-0915-0.

- The volume gathers together the communications presented at the colloquium on *Desktop Publishing in Astronomy and Space Sciences*, held in Strasbourg, France, 1–3 October 1991, at the Louis Pasteur University.

Wynter Snow. *T_EX for the Beginner*. Reading, Mass.: Addison-Wesley, 1992. xii + 377 + 23 (index) pp. (softcover), US\$29.25. **\$27 for TUG members.** ISBN 0-201-54799-6.

- This book is a carefully paced, tutorial introduction for people first learning the [T_EX] system. Special emphasis is given to what can go wrong, and how to fix it when it does. L^AT_EX notes are provided for use with a set of macros.

Latest issues of other T_EX newsletters

Les Cahiers GUTenberg: no. 12, décembre 1991, 85pp. ISSN 1140-9304. Official publication of GUTenberg, Groupe francophone des Utilisateurs de T_EX.

MAPS: issue 92.1, May 1992, 162pp. Official publication of NTG, Nederlandstalige T_EX Gebruikersgroep (MAPS = “Minutes and APendiceS”). Two issues per year. Contact: `ntg@hearn.bitnet`.

T_EXbulletin: no. 1, 1992, 48pp. Official newsletter (in Czech and Slovak) of CsTUG. Previous 4 issues in 1991 appeared without numbering. Four issues per year. Contacts: Karel Horak `horakk@csearn.bitnet`, Jiří Veselý `jvesely@cspguk11.bitnet`, or Jiří Zlatuska `zlatuska@cspuni12.bitnet`.

T_EXline: issue 14, February 1992, 28pp. Contact Malcolm Clark for details `malcolmc@sun.pcl.ac.uk`.

Die T_EXnische Komödie: vol. 4, no. 1, mai 1992, 68pp. Official newsletter of DANTE, Deutschsprachige Anwendervereinigung T_EX e.V. Four issues per year. Contact: `dante@dhdurz1.bitnet` or `dante@vm.urz.uni-heidelberg.de`.

Note: For more information on the various user groups, consult pp. 119–125 in TUG’s *1991 Resource Directory*.

“Hey — it works!”

Turning Double Brackets into Delimiters

The May 1992 issue of *The American Mathematical Monthly* contains an article by none other than Donald E. Knuth (“Two notes on notation,” 99(5):403–422) that discusses a couple of notational conventions that he has found useful. One was to use the notation $[\phi]$, for a predicate ϕ (that usually contains free variables) to be the numerical function that takes on the value 1 or 0 depending on whether ϕ is true or false. For example, $[x = y]$ is the numerical function that is 1 when $x = y$ and is 0 when $x \neq y$. Interestingly, many of my colleagues doing topos theory and other non-standard logics had been using similar notation $[[\phi]]$ for the same thing for at least two decades. The only difference was that the function could take on values other than simply 0 or 1, depending on the logic involved. Knuth credits his use of this to Kenneth Iverson’s APL, but our usage was certainly independent of that.

I originally generated these double brackets as suggested in *The T_EXbook*, page 437: `\def\{[\![]]`, which, as Knuth remarks, works reasonably well in normal size. After reading Knuth’s article, I began to wonder if the double brackets could be made to grow, just like delimiters. The code above does not work when you replace `[` and `]` by `\left[` and `\right]` since in larger sizes a backspace of `\thinmuskip` was just not the right amount. A number of experiments convinced me that the `\left` and `\right` macros simply did not work when they were in an `\hbox` of their own, so I could not see how to measure the size of the generated delimiters. Posting the question on `info-tex` brought no useful suggestions.

Finally, I decided that I could measure the width of the argument with and without the delimiters to work out the size of the backspace. Following a suggestion from Donald Arseneau on how to delimit the argument, I finally came up with the following:

```
\newdimen\argwidth
\def[#1]{\setbox0=\hbox{##1}\argwidth=\wd0
  \setbox0=\hbox{\left[\box0\right]}\advance\argwidth by -\wd0
  \left[\kern.3\argwidth\box0\kern.3\argwidth\right]}
```

For example, the code `\[\sum_{i \in I} A_i = A\]` generates: $[[\sum_{i \in I} A_i = A]]$.

I should mention that there are some fonts due to Alan Jeffrey called the St. Mary Road fonts that include this symbol as a symbol that grows. They are not currently generally available by anonymous ftp, but that may be remedied shortly. Keep in mind that the use of such fonts makes text non-portable.

Michael Barr, McGill Univ., Montreal, barr@math.mcgill.ca

The Cauchy Integral — revised and corrected

Both the regular L^AT_EX command `\int` and the command `\intcauchy` (introduced in TTN 1(1):15) yield an integral sign that is too small when used with size declarations, such as `\LARGE`, `\huge`, etc. Even with the default normal size they might end up being too small compared to the size of the integrand. The following macros will overcome the inconvenience, which appears also in T_EX when the integrand is oversized:

```
% Commands for producing approximations to large
% integral signs sized to the integrand dimensions
% 1.st argument: lower limit of integration without "_"
% 2.nd argument: upper limit of integration without "^"
% 3.rd argument: integrand
% Delimit all arguments with curly braces
%      --> Display math mode only <--
%
\newcommand{\largeint}[3]{%   for TeX write: \def\largeint#1#2#3{
\begingroup\setbox0\hbox{${\displaystyle #3}$}%
\setbox0\hbox{${\vcenter{\box0}$}}%
\dimen0=\ht0 \advance\dimen0 by 2pt \ht0=\dimen0
\dimen0=\dp0 \advance\dimen0 by 2pt \dp0=\dimen0
\left\lmoustache
{\vrule height \ht0 depth \dp0 width 0pt}%
_{\kern-0.5ex #1}^{#2}\box0\right.\endgroup}
%
\newcommand{\largeintcauchy}{\mskip3mu-\mskip-19mu\largeint}
Now you can type:
```

$$\int_{x_1}^{x_2} \sqrt{\frac{x^2+1}{x} + x} \sqrt{\frac{x^2+x+1}{x+\log x}} dx \quad \text{and} \quad f(t) = \frac{1}{2\pi} \int_{-\infty}^{+\infty} \frac{e^{i\omega t}}{\sqrt{\omega^2 + \omega + 1}} d\omega$$

Note: A typo slipped into the mathematical formula that was used to show the shape of the Cauchy integral on p. 15 of the last issue of TTN. The negative signs were missing; the correct formula should read:

```
$$ \intcauchy_{-\infty}^{\infty} f(z)\,d\!z =
\lim_{R\to\infty} \int_{-R}^R f(z)\,d\!z $$
```

$$\int_{-\infty}^{\infty} f(z) dz = \lim_{R \rightarrow \infty} \int_{-R}^R f(z) dz$$

Claudio Beccari
 Politecnico di Torino, Italy
 Internet: beccari@polito.it

(L)T_EX News

L_AT_EX Tables: workshop handouts available

Jackie Damrau has agreed to distribute the handouts from her workshop held at last summer's TUG'91 meeting at Dedham. The workshop covered such issues as `tabbing` vs. `tabular`, details on using each type of environment (tricks to use, problems to avoid), and a description of two other style files (`supertabs.sty` and `tables.sty`). Contact her either via e-mail or regular mail (Laboratory Computing Div., Computer Operations Group, MS-1011, 2550 Beckleymeade Ave., Dallas, TX 75237-3946).

Jackie Damrau
Superconducting Super Collider Laboratory
`damrau@sscvox1.ssc.gov`

A T_EX Macro Index

The T_EX community is blessed with a plethora of publicly-available macros; a decade's worth of experience is available from a series of archives throughout the world. The hitch, of course, is that there is no systematic catalogue of these macros, so the vast majority of T_EX users remain unaware of their existence.

With this in mind, I decided to compile an index of T_EX macros. The scope of the Index (whose release is now imminent) includes all macros that are available via anonymous ftp or mail-server or some similar mechanism. Priority is given to the major archives (Aston, Stuttgart, SHSU and ymir). The Index covers a variety of packages, including plain T_EX, `eplain`, L_AT_EX, `AMS-TEX`, `AMS-LATEX`, `LAMS-TEX`, `YTEX` and `TEXT1`. Commercial packages are included only if the information is supplied to me by the vendor.¹

If you have written a macro package that you think should be mentioned in the Index, please contact me (preferably by electronic mail) at the address below.

David M. Jones
MIT Laboratory for Computer Science
Room NE43-316
545 Technology Square
Cambridge, MA 02139
`dmjones@theory.lcs.mit.edu`

¹[A detailed description will appear in *TUGboat* 13(2), page 188, 1992.]

The Recent Updates to L^AT_EX 2.09

In March, an update for L^AT_EX 2.09 was released. The rationale behind this was to fix some well-known bugs, improve the usability for non-English languages (e.g., provide alternatives to English labels such as “Chapter”). Additionally, some problems that appeared when the update was used in conjunction with the NFSS (New Font Selection Scheme) were removed.

People were instructed to update *all* files. This was mostly to prevent them from inadvertently using old styles with new `latex.tex` and vice versa.

We tried to maintain backward compatibility, but there are a few things that won't work (mostly when you use an old `latex.tex` with the new styles).

Every change made is mentioned in `latex.bug`, and there are a lot of small comments in `latex.tex` and the `*.doc` files (mostly with `%` in front of them).

The main incompatibility I am aware of is the change of the counter in the bibliography environment from `enumi` to `enumiv`. Since this is a real problem for style files derived from `article`, for example, I made another change to use `\@listctr`, which is always the correct one. The other problem with `enumiv` was that I had forgotten to reset `\theenumiv` — with the result that documents with more than 26 references experienced problems.

Here are some questions I have received since the release of the update, and my answers to them.

- Is this a beta test version, or is it a stable precursor to L^AT_EX 2.10?

Answer: It is a stable version, meant to last until the next version of L^AT_EX comes out (which will probably be L^AT_EX3).

- As I understand it, the major difference between this version of L^AT_EX and the version that comes on the standard UNIX T_EX 3.14 distribution from byron.cs.washington.edu (`latex.tex`, dated 7 Dec 89) is that this version includes the NFSS. Are there other changes? Can you point me to new documentation I can give to users, especially for the NFSS?

Answer: The two major differences are:

- the internationalization (user-settable commands instead of fixed English texts)
- a better interface to the NFSS

The New Font Selection Scheme is not yet part of L^AT_EX 2.09, but we do regard it as a stable product. An improved version will be part of L^AT_EX3.

- Is there documentation which I can hand to users here?

Answer: Not much. Regarding internationalization, there is an article by Joachim Schrod that appeared in *TUGboat* some years ago. He made the necessary changes and distributed them under the name of I^AT_EX (International L^AT_EX).

As for the better interface to NFSS, these are mostly internals. There are a few comments in the file `nfss.bug` that comes with the NFSS package.

- Will I find user documentation for this when I pick up these files?
Answer: Yes, there is the L^AT_EX source for one of the articles that appeared in *TUGboat*.
- It sounds like I am going to have to recompile all of the L^AT_EX fonts. Is there a script to do this for me (at 10, 11, and 12 pt sizes)? Do I have to recompile the standard CM fonts as well?
Answer: No, you don't have to recompile all fonts. There are some changes to the METAFONT sources files:
 - Extra checks so that the line and circle fonts can no longer be run through METAFONT with `cmbase` preloaded (which gives incorrect font metrics)
 - Corrections to the font identifiers. The invisible S_LT_EX fonts would previously identify themselves as normal CM fonts.

These changes do not affect the shapes of the characters, nor the font metrics in the `.tfm` files. They do, however, affect the font identification (an ASCII string) contained in the `.tfm` file.

- I'm not sure what you mean by this response. What do I have to do, assuming that I'm starting out with a new installation of T_EX, with the fonts provided in the T_EX release and the new L^AT_EX? I need some explicit instructions.

Answer: If you don't have the `.tfm` and `.pk` files for the L^AT_EX fonts (the ones starting with 1..) you have to run them through METAFONT. If you have them already, there's no need to change.

My comment was that the changes to the METAFONT source files affect only one extra piece of information that is contained in the `.tfm` files, but not used by T_EX.

- Are there explicit instructions for installation? The file `latex.ins` does not seem to be consistent with the instructions that come with the WEB-to-C stuff in the standard UNIX T_EX distribution.

Answer: That is correct. We added a note saying so. Unfortunately, we overlooked another reference to WEB-to-C. I apologize. Please follow the instructions in the WEB-to-C documentation.

Rainer Schöpf
 Konrad-Zuse-Zentrum/Informationstechnik Berlin

News from Around ...

Estonian User Group

Enn Saar

The Estonian T_EX User Group was born on May 22, 1992, in Tartu, at the University Computer Centre. More than thirty people were present. We will have a T_EX archive on one of the University's PCs; we will set up a T_EX mailing list (or newsgroup, if all our e-mail clients can use this); and we will meet once every three months.

We hope to change all text processing in Estonia to T_EX — hopes must be unrealistic!

Send correspondence to:

Enn Saar, Tartu
Astrophysical Observatory, Toravere
EE2444 Estonia
saar@aai.tartu.ew.su

GUTenberg

Bernard Gaulle

I am pleased to announce the new GUTenberg board, elected during the recent annual meeting (June 15, 1992):

Bernard Gaulle (President)
Alain Cousquer (Vice-President)
Jacques Beigbeder (Secrétaire)
M.Y. Chartoire (Secrétaire Adjoint)
Olivier Nicole (Trésorier)
Eric Picheral (Trésorier Adjoint)

The board also includes the following members: Georges Weil, Jacques André (editor of *Les Cahiers GUTenberg*), Pierre Legrand, Yannis Haralambous, Éhoud Ahronovitz, and André Desnoyers.

GUST

Hanna Kotodziejaska

We are very pleased to inform you that Polish T_EX Users Group has been created and called "GUST".

Our first general meeting took place on June 5, 1992, in Warsaw, Poland. Over 60 people were present. The following members were elected to the Board of Directors:

Hanna Kołodziejska, President, Warsaw
 Włodzimierz Bzyl, Gdańsk
 Marek Kowalówka, Katowice
 Krzysztof Leszczyński, Warsaw
 Jerzy Ludwichowski, Toruń
 Włodzimierz J. Martin, Gdańsk
 Stefan Paszkowski, Wrocław
 Marek Ryćko, Warsaw
 Janusz Sosnowski, Warsaw

Our group has about 90 members. At present we are organizing our activities. Please direct all correspondence to the following address:

Polska Grupa Użytkowników Systemu T_EX “GUST”
 Instytut Badań Systemowych PAN
 ul. Newelska 6
 01-447 Warszawa, Poland
 Internet: gust@camk.edu.pl
 Bitnet: gust@plcamk61

Reports on Meetings

UKT_EXUG: 11 Feb. 1992

London

The UK T_EX Users’ Group held a meeting on “Book and Journal Production” on 11 February 1992 at the School of Oriental and African Studies, London.

Papers were given by Barbara Beeton (AMS), Malcolm Clark (Polytechnic of Central London), Geeti Granger (John Wiley & Sons Ltd), Rod Mulvey (the Printing House, Cambridge University Press), Peter Robinson and Stephen Miller (Oxford University) and Christina Thiele (Carleton University Press).

This gave an interesting spread — four of the papers were from those using T_EX professionally, with the remaining two from those “doing it themselves”. In fact, Peter Robinson’s Collate program (which he described) enables anyone to produce critical editions on a computer; used with Dominik Wujastyk’s `edmac` macros, these critical editions can be typeset expertly and easily. Malcolm Clark spoke about the trouble and delight of editing conference proceedings. Together with Christina Thiele, these three speakers broadly dealt with humanities, while the other three were in the more traditional T_EX area of scientific typesetting.

Rod Mulvey described the various steps and procedures that he followed when typesetting from T_EX or L^AT_EX source files and indicated the points at

which there was editorial involvement. Geeti Granger and Barbara Beeton also mentioned how these things were done at their companies.

While all the speakers were agreed that electronic submissions were not much use if they couldn't be read or if the disks contained the wrong text (and the need for the publisher to check these things), there was less agreement on how editorial corrections should be handled. There seemed to be a slight preference for traditional, paper-based proof correction; Rod Mulvey emphasized that matters like who makes corrections are best settled at the beginning and not left to chance.

There was agreement that if the author was going to send T_EX or L^AT_EX source she/he should use the appropriate styles from the start. In some cases submissions were accepted only if they conformed to a journal's style. The opposite from that also existed, where all the T_EX work was done by the publisher.

Another point raised was the extent to which the electronically held text did, could or should constitute an archive. Only Geeti Granger made sure that all the corrections, including last minute ones, were incorporated into the T_EX source. It is relevant that her company (the UK-based branch of John Wiley & Sons Ltd) is interested in providing on-demand printing — one of those promised benefits of electronic publishing that hasn't quite materialized. On a somewhat similar matter, Barbara Beeton mentioned the AMS's experiment with electronic distribution.

Carol Hewlett
UK T_EX Users' Group

Grupo de Usuarios de T_EX: 26 Feb. 1992 Mexico City

The 6th Annual Meeting of the Mexican TUG was held in Mexico City on 26 February 1992. The topic for the day was “Sobre el manejo estandarizado de documentos” [roughly: “Standardised Treatment of Documents”]. About 50 people attended the sessions, which were held at the Instituto de Investigaciones en Matemáticas Aplicadas y en Sistemas IIMAS, Universidad Nacional Autónoma de México (UNAM).¹

The first portion of the program was devoted to “Handling Information and Documents”, moderated by Carlos Volarde, with presentations by Jaime Curts, Roberto Guerra, Fernando Magarinhos, Franciso Hernández, and Arturo Ramírez. After a break, the second portion of the meeting began, moderated by Kurt Bernardo Wolf, devoted to “Document Structure and T_EX”. Participants included: Carlos Fernández Gaos, Constancio Hernández, Arturo Sánchez y Gándara, and the TTN correspondent.

¹[A detailed report by K. Bernardo Wolf on T_EX activities in Mexico appeared in TTN 1(1):7–11.]

The meeting went from 9 a.m. till 2 p.m., and was followed by a two-hour lunch at a faculty club. A good time was had by all.

William Woolf
TUG Treasurer

NTG Spring Meeting: 4 June 1992

Amsterdam

With the theme of “Scientific Publishing and T_EX, the meeting was hosted by CWI in Amsterdam, attended by about 40 people. In the morning we had our annual business to do: secretary and treasurer reports, and elections. The new board includes: Gerard van Nes (re-elected Secretary), Johannes Braams (Treasurer), Theo Jurriens (newly elected as Activities Organizer), and Kees van der Laan as Chair.

In the afternoon, it was time to listen to some fine presentations: Theo Jurriens (“From Observation to Publication”); Nico Poppelier (“On Standard Notation in Mathematics”); Ralph Youngen on T_EX-based production and services at the American Mathematical Society; Kees van der Laan (“Math into BLUES”); and David Salomon (“Index Generation with plain T_EX”).

It is hoped that CWI was inspired by this meeting and that the Dutch Math Society will adopt T_EX in future. The day finished with a nice Chinese meal and informal discussions. The next meeting will be 19 November in Meppel (near Groningen); the theme will be “The Future of T_EX and L^AT_EX”. So far, Yannis Haralambous and Frank Mittelbach have agreed to contribute to the meeting.

Kees van der Laan
NTG Chair

EuroT_EX92: 14–18 Sept., 1992

Prague, Czechoslovakia

Still Time to Register!

EuroT_EX92 is organized by the Czechoslovak T_EX Users Group, in collaboration with Charles University and Czech Technical University, Prague. It takes place in Prague from Sept. 14–18, 1992.

Invited speakers include Yannis Haralambous, John Hobby, Alan Hoenig, Anita Hoover, Chris Rowley, Daniel Taupin, Phillip Taylor. They will cover topics including the usage of T_EX for “non-standard” languages, typesetting music, METAFONT-like language for PostScript drawings, special effects with METAFONT and T_EX, the L^AT_EX3 project, aspects on the use of T_EX and L^AT_EX at university, WEB and even more . . .

Tutorials by Yannis Haralambous, Phillip Taylor and Klaus Thull following the conference will cover METAFONT and advanced topics in T_EX as well as an introduction to WEB.

Why come to EuroT_EX92?

The meeting is the first to offer extensive contacts with people from behind the iron curtain. It takes place in the Golden Heart of Europe — Prague, one of the most fascinating capitals in Europe. You can visit it at a surprisingly low cost. Indeed, we would like to make EuroT_EX92 in Prague accessible to the majority of T_EX fans from all over the world. It will be arranged at a modest level, yet covering all your needs. It is worth noting that low prices do not mean a compromise in quality; rather, they take advantage of the favourable exchange rates applicable to the hard-currency countries.

Other conditions

We have reserved rooms from Sunday, Sept. 13th to assist participants who may have difficulties with proper timing. This is meant especially to help them (APEX flights, flights not available every day, etc.). At least three tutorials will be organized for participants of EuroT_EX92 *after* the conference (afternoon of Sept. 18, and Sept. 19). Accommodation is booked in a modern student hostel Kajetanka in double rooms. Two double rooms form a unit and share facilities.

Lunches and refreshments will be served at the conference. Dinners are not included in order to enable you to research Czech restaurants and pubs on your own. An informal welcome party will be held on Monday evening, 7 p.m. An organ concert will take place probably on Wednesday, and some other pleasant surprises are included. The whole program from Monday to Friday forms a package (accommodation in double rooms, half pension from Tuesday to Friday, opening party on Monday evening, concert, conference fee, proceedings, tutorials for those who will stay a bit longer) for 330 DM (less than \$200). Those who would prefer a single room would pay 60 DM extra. For an *additional* 35 DM (45 DM for a single room) a day, a limited number of participants may stay until Sunday (one or two days more) either for tutorials or just to enjoy meeting friends and having good beer in some of the pubs. For accompanying persons, a special program will be organized including visits to galleries, places of interest, etc. They will be asked to pay 285 DM and should not book single rooms.

Climate

Since much of Prague's fascination is historical, architectural and cultural, it can be enjoyed at any time. The average maximum temperature in September is 18C (64F) and the weather is relatively stable.

Currency

The Czechoslovak Crown is rated approx. 17:1 to DM, approx. 28:1 to the US\$. Recently, prices of goods have increased somewhat. They are slowly approaching

western levels but in many respects Czechoslovakia is considered favourable and cheap for western tourists.

Transport

Czechoslovakia is easily reached by plane. The Prague airport is about 15 km from the city centre. Public transport is relatively cheap, but going by taxi, it is better to agree on the fare beforehand, since prices are not fixed and actually depend on drivers. Roads are relatively good. International trains connect Prague with Berlin, Munich, Nurnberg, Vienna, Warsaw, Budapest, etc.

For more information, contact one of the following people: Karel Horak horakk@csearn.bitnet, Jiří Veselý jvesely@cspguk11.bitnet, or Jiří Zlatuska zlatuska@cspuni12.bitnet. We look forward to seeing you in Prague!

Jiří Veselý
CsTUG
jvesely@cspguk11.bitnet

TUG Board Activities

Summary of Board Meeting¹

The TUG Board of Directors met for 2 days at Aston University in Birmingham, England, February 15–16, 1992. Sixteen board members were in attendance, as was Ron Whitney, TUG's Technical Director/Business Manager; five board members were unable to attend.²

Following welcoming remarks from Malcolm Clark, TUG's President, a revised agenda was circulated, items prioritised for Saturday and Sunday, and discussion time allocated to each item. As well, Malcolm suggested that some issues might best be treated by having a short introduction and discussion on Saturday, and then taken "off-line" by various working groups, who would discuss the issues in more detail during Saturday evening and come back with their reports on Sunday. This allowed all agenda items to be addressed in the time available.

¹[This report prepared by Ch. Thiele.]

²**Present:** Peter Abbott, Barbara Beeton, Malcolm Clark (Chair), Luzia Dietsche, Ken Dreyhaupt, Michael Ferguson, Peter Flynn, Bernard Gaulle, Roswitha Graham, Yannis Haralambous, Doug Henderson, Mimi Jett, David Kellerman, Joachim Lammarsch, Christina Thiele, Bill Woolf. **Absent:** Alan Hoenig, Anita Hoover, Kees v.d. Laan, Nico Poppelier, and Jon Radcl.

After accepting the previous Minutes (Board meeting, July 1991, Dedham Mass.), the board acknowledged with gratitude the efforts of former board members who, following the elections of last Fall, were no longer present.

As set down in TUG Bylaws, the board was required to select its officers, replacing the two interim officers appointed at the July 1991 Board meeting (Allan Dyer, Acting Treasurer, and Christina Thiele, Acting Vice-President and Secretary). The new officers are: Ken Dreyhaupt (Vice-President), Bill Woolf (Treasurer) and Peter Flynn (Secretary). All were approved by consensus.

A working group was formed to discuss the preliminary 1992 budget which Ron Whitney had drawn up; members included Ken Dreyhaupt, Mimi Jett, Joachim Lammarsch, Bill Woolf, along with Ron Whitney. They presented a revised budget which was further modified and then adopted. Other financial items discussed included reimbursement for attendees of the Aston board meeting, and salary levels for an Executive Director. With the addition of Peter Flynn, newly elected as TUG's Secretary, the members of this working committee were subsequently appointed to a Budget Committee.

Ron Whitney, TUG's current Technical Director/Business Manager, had previously informed the board of his decision to leave TUG. The board passed a motion of appreciation "for his support over the past year, in particular the successful management of last year's budget and in anticipation of his continued support this year, and during the search process." The Executive Committee, with the addition of Mimi Jett, was charged with the task of searching for a new Business Manager/Executive Director.

Mimi Jett proposed a plan ("waterfall strategy") which would serve as a useful approach to provide direction to the new person in the office (either Business Manager or Executive Director), given the limited resources available. The approach would also be explored by the Long Range Planning Committee. Mimi proposed that a draft document be prepared for the board, in conjunction with the office, which would clarify their goals and objectives, and would include an operational plan.

The matter of defining the role of TUG Vice-Presidents (other than the elected one) was once again on the agenda. A committee headed by Luzia Dietsche, and including Peter Abbott, Ken Dreyhaupt, and Yannis Haralambous was established "to find rules by which a representative of a local user group may be invited to join the TUG Board of Directors to be a full member of that board. The rules should be established by the board meeting in Portland."

A working group comprising Barbara Beeton, Roswitha Graham, and Joachim Lammarsch addressed issues relating to election procedures. Their proposals covered such items as election committee membership, minimum requirements of candidates for TUG president, ballots for institutional members, publishing of results, terms of office (length of terms, staggering of elections), and number of signatures for nomination. The working group was to develop recommendations for approval at the July board meeting.

A working group to revise and update the TUG Bylaws was also established (Barbara Beeton, Peter Flynn, and Christina Thiele). An additional task was to make the bylaws text more accessible and less jargon-like in nature. The working group members were subsequently named as the new members of the Bylaws Committee.

The issue of how to begin manning the Technical Council was handed to a working group of Michael Ferguson, Bernard Gaulle, Yannis Haralambous, and David Keller-

man. Their recommendations included a bylaws change to deal with the general makeup of the Technical Council (in Article V, section 2), and that Alan Hoenig, Michael Ferguson, and Yannis Haralambous represent the Board. Michael Ferguson was appointed Technical Council Chair. Both proposals were approved by the board.

A working group to discuss the various issues related to TUG's publications was put together with Malcolm Clark, Luzia Dietsche, and Doug Henderson. A proposal which arose from these discussions, to take in paid advertising in the newsletter TTN, was accepted unanimously.

The problems associated with locating sites for TUG's annual meetings was assigned to a working group with Michael Ferguson, Bernard Gaulle and Christina Thiele. No firm solutions were proposed, and the working group, reconstituted as the Conference Planning Committee, was charged with providing the board with potential sites for the 1993 TUG Annual Meeting, and recommendations on conference planning in the future. The goal of having a 2-year lead-in to meetings was strongly endorsed.

The board accepted the generous offer of the UK T_EX Users' Group and the Aston Archivists to run **TeXhax** for the next three years for a one-time cost of \$5,000. A vote of thanks to Pierre MacKay was also recorded for the work done by the University of Washington in maintaining the electronic forum for T_EX users.

It was agreed by consensus that two lists be established for e-mail correspondence by board members: one for documents, which would be considered open to all TUG members [as per the TUG Bylaw in Article III, Section 7 *Access to Documents*], and one for private board discussions, not open to non-board members. All messages are to be numbered, to detect missing messages — the document list to have numbers prefixed with a “D”. This policy is not retroactive.

Reports from various committees were presented, mostly for purposes of information rather than with any proposals for board action. These included: **dvi** Standards Committee (Barbara Beeton reporting), Editorial Committee (Barbara Beeton), Long Range Planning Committee (LRPC) (David Kellerman), Membership Committee (Malcolm Clark), Program Committee (Mimi Jett), Publications Committee (Barbara Beeton), Scholarship Committee (Barbara Beeton), and T-shirt Committee (Doug Henderson). As well, Malcolm Clark provided a brief report on the status of the L^AT_EX3 project.

Other issues discussed included TUG's non-profit status, optimisation of board resources, proposals for 2-tier and student membership categories (tabled until the July 1992 Board meeting in Portland), membership drives, and potential TUG support for a museum on computerised typesetting.

Next Board Meeting

25–26 July, at TUG'92, Portland, Oregon, USA
--

Upcoming Events

27–30 July	TUG'92: “T _E X in Context.” Portland, Oregon.	TUG Office tug@math.ams.com
3–4 Sept.	DANTE e.V.: General Meeting. Clausthal-Zellerfeld (near Göttingen).	S.J.Šarman rzsyst@ibm.rz.tu- clausthal.de
14–16 Sept.	EuroT_EX 92: Prague, Czechoslovakia.	Jiří Veselý jvesely@cspguk11.bitnet
22 Sept.	UKTUG: joint meeting with British Computer Society Electronic Publishing Group on “Structured Documents.” Nottingham, UK.	Carol Hewlett hewlett@vax.lse.ac.uk
12 October	Nordic Group: Annual General Meeting. Copenhagen, Denmark.	Roswitha Graham roswitha@admin.kth.se Peter Busk Laursen unipbl@uts.uni-c.dk
14 October	UKT_EXUG: Annual General Meeting. Aston University, Birmingham, UK.	Carol Hewlett hewlett@vax.lse.ac.uk
19 Nov.	NTG: “L ^A T _E X, L ^A T _E X3, and font selection.” Meppel (near Groningen), The Netherlands.	Gerard van Nes vannes@ecn.nl

Note: Also consult the “Calendar” in the next issue of *TUGboat* for more dates, and for information on TUG courses.

TUG 1992 Election

The term of the TUG President, Malcolm Clark, will expire at the end of this year, and Malcolm has stated his intention not to stand for re-election.

The Bylaws provide that “any member may be nominated for TUG president”. The name of any member may be placed in nomination for election to this office by submission of a petition, signed by two other members, to the TUG office at least 30 days prior to the election. In addition, any member may be nominated for this office during the annual business meeting, which will be held this year during the annual conference in Portland.

In order to make the governing of TUG more effective, and to decrease the burden on new officers and board members of catching up on board business when they assume office, the elections committee has proposed that the election schedule be changed over the next couple of years. Under this proposal, new officers and board members would assume office at the annual meeting following their election rather than on January 1; the terms of the present office-holders will adhere to the old schedule, and the new schedule would be phased in with the next election. (The terms of all the elected board members currently run through the end of 1993.) If approved, this proposal will affect the length of the term of the president to be elected in this cycle. The proposal is on the agenda for the board meeting in Portland. Details will be published after board action; nominees will be informed at once, and the exact term will be shown on the ballot.

Nomination forms, including full details of requirements and this year’s election schedule, are being prepared. A form should be included with this issue of TTN, or may be obtained from the TUG office on request. Forms will also be distributed with *TUGboat* 13, No. 2, and will be available at the Portland meeting.

Barbara Beeton
for the Elections Committee

T_EX and TUG NEWS

Table of Contents

<i>Editorial</i>	1
L ^A T _E X3, TUG, and You <i>Alan Hoenig</i>	2
Update on T _E X in Japan <i>Harumi Fujiura</i>	5
Typographer's Inn <i>Peter Flynn</i>	11
New Publications	13
“Hey — it works!”	
Turning Double Brackets into Delimiters <i>Michael Barr</i>	14
The Cauchy Integral — revised and corrected <i>Claudio Beccari</i>	15
(L ^A)T _E X News	
L ^A T _E X Tables: workshop handouts available <i>Jackie Damrau</i>	16
A T _E X Macro Index <i>David M. Jones</i>	16
The Recent Updates to L ^A T _E X 2.09 <i>Rainer Schöpf</i>	17
News from Around	
Estonian User Group <i>Enn Saar</i>	19
GUTenberg <i>Bernard Gaulle</i>	19
GUST <i>Hanna Kołodziejaska</i>	19
Reports on Meetings	
UKT _E XUG <i>Carol Hewlett</i>	20
Grupo de Usuarios de T _E X <i>William Woolf</i>	21
NTG Spring Meeting <i>Kees van der Laan</i>	22
EuroT _E X92 <i>Jiří Veselý</i>	22
TUG Board Activities	
Summary of Board Meeting	24
Upcoming Events	27
TUG 1992 Election <i>Barbara Beeton</i>	28

The T_EX Users Group is seeking applicants for the position of Executive Director

The individual selected for this position will oversee the business and information dissemination activities of TUG; direct the promotional program to develop membership and TUG activities; develop a program of volunteer efforts for TUG activities; manage a small office staff with clerical, technical, and bookkeeping functions; and interact with TUG members and others in fields of interest to TUG. The Executive Director will report to the TUG Board of Directors.

The following criteria will be considered as applicants are evaluated:

- experience in managing a business;
- skill in managing the retrieval, organization and dissemination of information;
- experience with the program T_EX and related programs;
- computer experience and capability of understanding technical questions regarding T_EX and related programs;
- good writing and speaking skills;
- good interpersonal skills;
- knowledge of considerations in managing a professional, non-profit association.

Applicants for this position should send indication of their interest and copies of their *curriculum vitae* to:

Search Committee
T_EX Users Group
P.O. Box 9506
Providence, RI 02940 USA

The T_EX Users Group is an Equal Opportunity Employer.