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TEX and TUG NEWS

for and by the TEX community

A Publication of the
TEX Users Group

Electronic version

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 selection scheme has not yet been implemented). Correspondence may be sent via e-mail to **tug@math.ams.org** with the subject line **NEWSLETTER**. Regular mail should be addressed to the Publications Committee, % TUG Office at the address below.

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Editorial

This issue comes so quickly on the heels of the February one . . . now we can say we're finally on target with our quarterly publication dates. Next issue will be out in early July. And that means I can now give you some deadlines for submission of material for future issues.

July issue	June 1st
Oct. issue	Sept. 15th
Jan. issue (1994)	Dec. 1st
Apr. issue	March 15th

A reminder: my editorship of *T_EX and TUG NEWS* will come to an end this year; potential candidates should contact me as soon as possible.

This issue we have a number of interesting items on offer, from reports on activities in Estonia and the Nordic countries, to an announcement about a contest! Yes — a contest! Something for pure fun. Go look at p. 28 for details.

And as hinted at in the previous issue, we now have two new members on the TTN team, one for an existing column, and one for a new column.

Jeremy Gibbons, a frequent contributor to several electronic lists, has agreed to take on “Hey — it works!”.

Jeremy is currently a lecturer in computer science at the University of Auckland, New Zealand. His research interests range from program specification and transformation to algorithm design. He has been an inveterate T_EX and METAFONT hacker since 1988. Jeremy can be reached at jeremy@cs.aukuni.ac.nz.

And Robert Becker, who has also started up a local user group at MIT, is going to produce a new column for TTN. “You rang . . . ?” will be aimed more at providing answers to questions, and writing about things which can make your T_EX-ing life easier.

Robert Becker is a secretary at the Department of Mathematics, M.I.T. where he's been typesetting with $\mathcal{A}\mathcal{M}\mathcal{S}$ -T_EX, T_EX, and L^AT_EX under DOS 5.0 and UNIX on a Sun Sparcstation or X-terminal since 1991. Along with his writing and computer consulting, he runs the local user group at M.I.T., and occasionally teaches L^AT_EX for TUG.

Contact them directly: submissions to Jeremy, queries to Robert. Because of an overloaded mailbox, Robert asks that correspondence be addressed to his snail address — see his column for the relevant information.

And something on the more serious side — we have board elections coming up this fall. First notice is contained in this issue (p. 23).

Attention all those who have plans to attend some of the TUG courses later this year. *Except for* “Book and Document Design”, all courses previously scheduled for Boston have been moved to Santa Barbara.

There have been a gratifying number of requests for my T_EX file to print up font tables (TTN 1,4), and for the two L^AT_EX files supplied by Claudio Beccari (TTN 2,1). I also received some additional information from Nelson Beebe:

I enjoyed reading the issue of TTN v2n1 which arrived on Friday, but didn't get read until last night. On p. 13, you comment on “Files to print up font tables”.

Every T_EX distribution should contain Don Knuth's `testfont.tex` file that will do what this article wants to do.

Besides that handy file, there is the L^AT_EX `testpage.tex` file that produces a page diagram that can be used for checking printer alignment.

And there is my `layout.tex` file that illustrates the L^AT_EX style page dimension parameters; its 2-page output is shown in David Buerger's book on L^AT_EX.

And Robert mentioned that he had found a file, `fontbl.tex`, in the emT_EX package, which appeared to also print up fonts in table form.

For those of you who are using the list of “Other T_EX User Groups” as a reference (pp. 27–28 of TTN 2,1), please note the following additions and corrections. The Czech user group information contained two typos: ‘Českoslpvenské’ should read **Československé** and ‘uživalelâu’ should read **uživalelů**. Another correction: the Dutch user group NTG has a general e-mail address: `ntg@nic.surfnet.nl`.

Christina Thiele
Editor, T_EX and TUG NEWS

Did you know ... ?

... that the Knuth Scholarships began in 1986? The first mention in *TUGboat* appeared in Vol. 7, no. 1, p. 7 (1986). The following people have won the scholarship:

1986: Jackie Damrau
1987: Marie McPartland-Conn and Doris Hsia
1988: Larry Sharlow
1989: Frank Mittelbach
1990: Linda Williams
1991: [no winner]
1992: Jenny Smith

Updates on the L^AT_EX3 Project

Alan Hoenig
L^AT_EX3 Liaison for TUG

Volunteer Work for the L^AT_EX3 Project

The December 1992 *TUGboat* (volume 13, no. 4; page 510 ff.) included a call for volunteers to work on the L^AT_EX3 project. If you refer to that article, you will see that volunteers are needed at all levels of skill — it's not just for T_EXperts! With additional experience, it has become clear that additional tasks need to be undertaken, and we propose to publish additions to the master list here in *T_EX and TUG NEWS*.

The procedure for volunteering is spelled out in detail in the original *TUGboat* article. Basically, you need to get hold of the coordinator for the task below (or of any other task in the list). We hope to be hearing from you.

Research on the most commonly used L^AT_EX styles

Even though L^AT_EX3 will internally not be fully code-compatible with L^AT_EX 2.09, it is highly desirable that a well-written L^AT_EX 2.09-compatible document should be formatted with L^AT_EX3 with little or no rewriting. To achieve this, the currently most popular L^AT_EX macros will be rewritten for L^AT_EX3. But which are the most popular L^AT_EX macros?

A questionnaire has been pre-tested and completed. Plans are to distribute this to some 10 sites throughout the world, a fair number to each. This will, hopefully, come close to a real stratified sample survey.

Volunteers are needed to hand out the form to an unsuspecting group of L^AT_EX users, punch the data (fairly easy — we only keep a frequency count), and mail the frequencies to Rolf Lindgren. He wants the filled-in forms as well, to be available to others who might want to do research on L^AT_EX use.

Time Estimate: 1 hour to administer the form, 2-3 hours to process the completed forms, 1 hour to translate the form if necessary.

Coordinator: Rolf Lindgren (28 January 1993).

E-mail: rolf.lindgren@usit.uio.no.

Typographer's Inn

DTP 'Chamber of Horrors'

Thank you to all those who have sent me contributions: the collection has started but more are welcome. Arthur Reed of Silver Spring, Maryland, points out that in the summer of 1992, William Safire's 'On Language' column in the New York Times Magazine had a piece on this very question. He also sent a reference to a book printed using T_EX which 'contains many underfull vboxes, and the vertical glue between paragraphs, section headings and figures varies significantly', producing what he thinks is a very unappealing book. I won't cite chapter and verse until I've checked it out, but clearly we are not immune!

What has been very interesting has been seeing the things people trip up on most often, and one of the more obvious ones has been hyphenation. T_EX hyphenates pretty well if you are using common continuous English prose, and there are hyphenation patterns available for many languages now. Other DTP systems are not so well-provided, but the most obvious pitfall in non-T_EX systems seems to be not turning hyphenation on at all, even in ragged-right or ragged-centered setting.

The 'solution' offered by most systems to lines which do not justify happily without hyphenation is to expand the inter-letter spacing. This appalling contrivance is acceptable only in newspaper columns, which are narrow and set against the clock, and even there, they were only a result of the way that Linotype and Intertype machines did their justification. Nowadays there is no excuse whatsoever for this rubbish, but examples abound, and some users are even proud of their clever systems which add space between letters in this way.

An example I found the other week shows the opposite effect, of allowing the system to hyphenate in ragged-centered setting where it is not normally sensible:

Advance ticket purchase recommended as audience will be limited to 100 persons

Breaking the line after the word 'recommended' would have been the ideal, but my guess is that having told the system 'centre-align this paragraph', automated hyphenation was the default. The full file, for those who wish to inflict it on themselves, can be picked up as `garden.tex` from `curia.ucc.ie` in `pub/typography`. The document was originally set in Gill Sans, but this version uses Computer Modern Sans in the interests of portability. Keep 'em rollin'.

Titles

Amongst some further suggestions for dropped initial caps (or raised ones, as well), Christina asked me what are the rules for breaking titles? This arises when a title (often done in bold or a larger face) runs over one line and has to be broken at a sensible place. Her example is a good one: ‘Does one do it right after a noun phrase, or between “little words”: *eg* in “Upper Canada and the War of 1812” is it after “Upper Canada” or between “and” and “the”?’

My own preference is for the first approach, so that ‘little words’ go on at the start of the following line, but I don’t think there can easily be a hard and fast rule for something which is going to be a largely æsthetic judgment. In very large type, you might also have to take account of where the ascenders and descenders fall, as you might need to close the linespacing a little without them knocking into each other.

She also mentions flush-left (and I guess flush-right) titles and a rule about only having title lines run about $\frac{2}{3}$ of the way across a line before they’re broken. I’d be interested in the source for this, as it sounds like a useful rule of thumb and I’ve been unable to track it down.

Punctuation and Quotes

I wasn’t going to pursue this one, but Dale Gaumer (from `netwrk.UUCP` [?]) wrote that he puts the period after the closing quotes when the whole sentence is in quotes, but to avoid criticism, has resorted to a subterfuge of sorts: using `\rlap`. so that the two marks are one over the other. This surely needs some sort of prize for ingenuity! He adds, ‘some of my critics don’t even notice this. But it is a bother, and T_EX doesn’t follow with the proper end-of-sentence horizontal space!’

Long-s ligatures

Andrea de Leeuw van Weenen wrote from Leiden to say that using some specially made characters including these ligatures caused problems when the publisher wanted abbreviations expanded in italics for an Old Icelandic document (*c.* 1200) as this meant shifts from roman to italic up to eight times in a word!

One problem with ligatures for non-English work is the need to retain the effect of ligaturing when, for example, the following vowel requires an accent, as in *fi*. A pragmatic solution I came up with (but haven’t tried yet) is to doctor a `.pk` file with `pkedit`, make the f-ligatures into s-ligatures and then incorporate the glyphs into a virtual font.

New Publications

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Malcolm Clark. *A plain T_EX Primer.*

Oxford: Oxford University Press, 1992. 481pp. ISBN 0-19-853784-0 (Hbk), ISBN 0-19-853724-7 (Pbk).

- “This primer introduces plain T_EX, and aims to help the reader get started. It explains why T_EX approaches its subject in the way it does, and provides the context into which it fits. Another thread is the emphasis placed on document structure. Stress is also laid on practical work. The book is aimed at scientists and researchers preparing their own books and papers, or technical typists used to the conventions and jargon of their field.” [adapted from the publisher’s description]

Stanley A. Sawyer and Steven Krantz. *A T_EX Primer for Scientists.*

Boca Raton: CRC Publishers, 1993. 175pp. US\$29.95 (\$36.00 outside USA). ISBN 0-8493-7159-7.

- “This concise, straightforward text covers all basic topics of equation typesetting, and some advanced topics: how to automatically generate a table of contents, and indices; how to make text flow around a graphic; how to add more fonts; how to change fonts in math mode (for titles, etc.). In an appendix differences between T_EX, L^AT_EX and $\mathcal{A}\mathcal{M}\mathcal{S}$ -T_EX are discussed.” [adapted from promotional material]

Hans Ibrus. *Väike Eesti T_EXiraamat. [The Small Estonia T_EXbook].*

Tartumaa, Estonia: a/S “KompuT” kirjastus, 1992. 144pp.

- Preface by Enn Saar. [Further description on p. 18.] Appendix A is a translation into Estonian of *First Grade T_EX*, by Arthur Samuel.

Gordon Müllejans. *METAFONT. Eine Referenz.*

Bonn: Addison-Wesley, 1992. 176pp. DM 39,90. ISBN 3-89319-363-4.

- This is neither a tutorial nor a textbook on METAFONT. It is a reference tool, and consists mainly of listings with short descriptions, in particular of the basic METAFONT commands, the macros of cmbase, and the parameters used to define the CM fonts.

Latest issues of other T_EX newsletters

Die T_EXnische Komödie: vol. 4, no. 4, Dezember 1992, 56pp.

La Lettre GUTenberg: numéro 0, février 1993, 16pp.

“Hey — it works!”

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Greetings. I have just taken over the column “Hey — it works!” from Christina Thiele. This column is designed for little tricks — even ones that seem trivial or inelegant — that others may find useful. If you have any such items, send them in to me at the address above.

The first piece in this issue, from Navindra Gambhir, continues from Claudio Beccari’s note in the previous issue on aligning decimal points; it is an improvement in that you don’t need to manually add padding after the decimal place, nor (as with `decalign.sty`) do you need to specify the number of decimal places used.

My colleague Hans Guesgen’s piece shows how to insert L^AT_EX material into a bibliography in a disciplined way.

The third piece highlights the fact that the column title could be taken in two ways. The intended meaning is one of practicality (“Hey, don’t knock it — it works!”), but it could also be taken as one of surprise (“Well, bless my cotton socks, it *works!*”). Alan Jeffrey’s note on pattern matching falls squarely into the latter category.

But enough talk — on with the show!

Lining up decimal points

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A method to line up the decimal points in a column of a numeric table that uses active ?’s to produce blank spaces is explained on p. 241 of *The T_EXbook*. The question whether there is a “nicer” way to do this was recently raised on Info-TeX. Hence, for example, one would like to be able to typeset the table

Jan. 8	0.125	2.25	.0625
Feb. 13	128.5 ± .1		<.01
Mar. 23	16	256	.5
Apr. 29	.25	.0	32

by simply typing

```

$$\dalign{\indent#\hfil&&\quad\span\daligntemplate\cr
  Jan.~8& 0.125& 2.25& .0625\cr
  Feb.~13& 128.5\pm.1& & <.01\cr
  Mar.~23& 16& 256& .5\cr
  Apr.~29& .25& .0& 32\cr}$$

```

The trick, which is based on an idea also suggested on p. 241 of *The T_EXbook*, is to make the “.” behave locally like an alignment tab within `\daligntemplate`. To handle numbers that do not have a decimal point, `&` is also made to behave locally like *two* alignment tabs with an empty column in between. Some care is needed to get the timing right when changing the category codes.

```

\def\dalign#1#{% #1 is <box specification>, if any
  % change the catcodes before reading <alignment material>
  \dalignglobaldefs \dodalign{#1}}
\def\dodalign#1#2{% #1 is <box specification>
  % #2 is <alignment material>
  \halign#1{#2\cr\cr}}
\def\daligntemplate{\daligndefs%
  \hfil###$\tabskip=0pt&$.##$\hfil}
{\catcode'\.=\active \catcode'\&=\active \catcode'\|=4
  % | is temporary alignment tab
  \gdef\dalignglobaldefs{\catcode'\.=\active \chardef.='\.%
  \catcode'\&=\active \let&=} % active . and & act normally
  \gdef\daligndefs{\def.{|}\def&{|omit\hfil|}}

```

The macro `\dalign` should be used within a group, e.g., inside a `\vbox`, or within `$$`'s, as in the above example. Such grouping can also be made a part of the macro by adding it to the definitions of `\dalign` and `\dodalign` in the obvious places. Also note that `\daligntemplate` sets `\tabskip` to `0pt`, so it has to be reset explicitly, if necessary, after `\daligntemplate` in the preamble.

Headings in reference lists

Hans W. Guesgen
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Since I want to use my B_IT_EX bibliographies also for reference lists in non-scientific papers like annual reports, resumes, etc., I am interested in incorporating headings and commenting text into a reference list. Of course, it is always possible to edit the resulting `.bbl` file to get the job done, but this is annoying if you want to produce such papers on a regular basis. So I looked for another way of adding interspersed headings to the reference list.

The trick I came up with might look awful, but it certainly works. I created an additional `.bib` file that contains all the headings I want to use in the reference

list. The headings are defined as usual L^AT_EX commands within @misc BIB_TE_X entries:

```
% file headings.bib
@misc{books, note = "\bibheading{Monographs}%" }
@misc{inbooks, note = "\bibheading{Papers in Books}%" }
@misc{injournals, note = "\bibheading{Journal Articles}%" }
```

It is essential to have a % as the last character in the note field to comment out the punctuation character produced by BIB_TE_X.

After defining the set of potential headings, I wrote a L^AT_EX style file that specifies what to do with them. Typesetting the reference list with labels wasn't appropriate any more, since I didn't want the headings ending up with labels. Thus, I redefined the \thebibliography command, replacing the enumerating list environment with a simple one, and I defined how the headings are to be typeset in the new environment:

```
% bibheadings.sty, for bibliographies with interspersed
% headings; use simple, rather than enumerated, list.
\def\thebibliography#1{%
  \list{}{\leftmargin0em \itemsep0.5\baselineskip}%
  \def\newblock{\hskip .11em plus .33em minus .07em}%
  \clubpenalty4000\widowpenalty4000 \sfcode'\.=1000\slippy}
% typeset the headings in the same format as subsections
\def\bibheading#1{\subsection*{#1}}
```

Now I can cite (via \nocite) the entries of my actual bibliography and the pseudo-bibliography containing the headings in the order they are supposed to appear in the bibliography. Whenever a pseudo-entry is cited, for example, by \nocite{books}, the contents of its note field are included in the .bbl file:

```
\begin{thebibliography}{1}
..
\bibitem{books}
\bibheading{Monographs}%.
..
\end{thebibliography}
```

The following is an example of L^AT_EX source for producing a reference list with headings.

```
\documentstyle[bibheadings]{article}
\begin{document}
\section*{Relevant Publications}
```

```

\bibliography{headings,mybib}
\bibliographystyle{unsrt}
\nocite{books} % heading
\nocite{guesgen:89:consatbook} % book
\nocite{guesgen:hertzberg:92:dynconsbook} % book
\nocite{injournals} % heading
\nocite{guesgen:ea:92:jpd} % article
\end{document}

```

Processing the source with L^AT_EX and B_IB_TE_X results in the following:

Relevant Publications

Monographs

H.W. Guesgen. *CONSAT: A System for Constraint Satisfaction*. Research Notes in Artificial Intelligence. Morgan Kaufmann, San Mateo, California, 1989.

H.W. Guesgen and J. Hertzberg. *A Perspective of Constraint-Based Reasoning*. Lecture Notes in Artificial Intelligence 597. Springer, Berlin, Germany, 1992.

Journal Articles

H.W. Guesgen, K. Ho, and P.N. Hilfinger. A tagging method for parallel constraint satisfaction. *Journal of Parallel and Distributed Computing*, 16:72–75, 1992.

\howto pattern match in T_EX

Alan Jeffrey
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T_EX's pattern matching ability is quite powerful, but is also quite infuriating. It allows you to pattern-match against an arbitrary string, but when it fails, it can do nothing but produce an error message. For example, if you say:

```

\def\foo(#1,#2){\message{(#1 and #2)}}
\foo(a,b) \foo(c) \par

```

Then you will get a message (a and b) but you will then get an error message telling you about a Runaway argument. It would be nice if you could use T_EX's pattern-matching ability, but provide more than one pattern, and have T_EX use the latest definition that matches. This note describes such a command, so you can say:

```

\howto\oneof(#2){#2}
\howto\oneof(){ }
\howto\oneof(#2,#3){#2 \vee \oneof(#3)}
$$ \oneof(a,b,c,d) $$

```

and get the result:

$$a \vee b \vee c \vee d$$

This definition says that any argument matching the pattern (x, y) should produce $x \vee \text{\oneof}(y)$, any argument matching the pattern $()$ should produce nothing, and any argument matching the pattern (x) should produce x .

This is all done using TEX's pattern-matching ability (which explains the rather odd fact that the parameters have to be numbered starting at #2, since a pattern may fail by having something before parameter #2, which has to be matched by parameter #1). If you say:

```

\howto\foo(pattern){expansion}

```

then we look to see if `\foo` is already defined, and if it is not, we define it to produce an error message. Then we increment the counter `\actioncount` to get n and define the command `\action- n` so that `\doaction\action- n (x)` expands out to "*expansion*" if x matches *pat*, and to the previous definition of `\foo(x)` otherwise.

A wonderfully incomprehensible piece of programming, but hey — it works!

```

\def\xcs#1#2{\expandafter#1\csname#2\endcsname}
\newcount\actioncount
\def\howto#1(#2)#3{%
  \xcs\ifx{\expandafter\gobble\string#1}\relax
  \def#1{\erroraction#1}\fi
  \advance\actioncount by 1\relax
  \expandafter\defaction\expandafter{#1}{#3}{#2}%
  \def\temp##1##2##3##4##5##6##7##8##9{\def\temp{(#2)}}%
  \temp\empty\empty\empty\empty\empty\empty\empty\empty\empty
  \edef#1{\noexpand\doaction\xcs\noexpand
    {action-\the\actioncount}\temp}}
\def\defaction#1#2#3{%
  \xcs\def{action-\the\actioncount}##1(#3){\applyto{#1}{#2}}}
\def\gobble#1{}
\def\applyto#1#2#3{#3{#1}{#2}}
\def\doaction#1(#2)(#3){#1(#3)\success(#2)\failure(#3)}
\def\success#1#2(#3)\failure(#4){#2}
\def\failure#1#2{#1}
\def\erroraction#1(#2){%
  \errmessage{I don't know how to \string#1(#2)}}

```

(L^A)T_EX News

Jones Index of T_EX Macros

The Index of T_EX Macros, compiled by David Jones, was first mentioned in TTN 1,2:16; a more detailed description has also appeared in *TUGboat* 13, no. 2, pp. 188–189. In mid-March, M.A.Carriba@sheffield.ac.uk posted a very nice summary of archive locations for this index to `comp.text.tex`, and it might be useful to reproduce that information here. One thing to note: *not all archives have the latest version*, dated 12 December 1992 (v. 1.06). Check that you are getting the revised one. The canonical version is always available from the `theory` site.

The originating site is:

```
theory.lcs.mit.edu  pub/tex/TeX-index.zip
theory.lcs.mit.edu  pub/tex/TeX-index
[18.52.0.92]
```

Some other US sites are:

```
Niord.SHSU.edu      [fileserv.tex-index]tex.index
Niord.SHSU.edu      [listserv.tex-index]tex.index
ftp.math.utah.edu   pub/tex/tex-index
ymir.claremont.edu  [anonymous.tex.documentation]tex-index.txt
```

European sites include:

```
archive.cs.ruu.nl   TEX/DOC/TeX-index.Z
ftp.diku.dk         pub/TeX/misc/TeX-Index.Z
ftp.th-darmstadt.de pub/tex/documentation/styles-and-
                    macros.Index.Z
ftp.uni-stuttgart.de /soft/tex/documentation/TeX-index
TeX.ac.uk           [tex-archive.doc]tex-index.txt
TeX.ac.uk           [tex-archive.doc]TeX-index.txt
```

To retrieve it by mail, send a message containing only the line

```
send tex TeX-index
to
archive-server@theory.lcs.mit.edu
Or
```

SENDME TEX-INDEX
to
FILESERV@SHSU.BITNET
or
FILESERV@SHSU.edu

SHSU will deliver this file in 8 parts.

TTN Index

Jackie Damrau
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It is time once again to begin working on the annual TTN index of this past year's issues. The last index covered the past two years; however, we have heard no suggestions, complaints, or ailments from the TTN community on how successful this index has been.

I would like to solicit your response on improvements or additional topics that you would like to see in this index. The TTN editorial staff are planning at this time to leave the index cumulative, showing all issues; however, let us know if you think a yearly index would be more beneficial for your use.

Send your suggestions to me at the above address; use the subject line **TTN Index Suggestions** to make it easier for me to sort the messages.

You Rang ... ?

Robert Becker
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This being the first column, the Q&A section will be a little short. Future columns will be virtually all question-and-answer.

What is this column?

This column will attempt to satisfy two major needs. First, a hardware/software tips and tricks column for the general user, general being those who are trying to get their flavor of T_EX to do what they want and perhaps to ease their job. Second, it will give tips on how to install various versions of T_EX and their support packages (DVIPS under DOS, for example).

How will it do this?

Write to me at the above address via letter, postcard, special delivery, what-have-you (but not C.O.D.!). Complain, voice opinions, ask questions. I definitely want to hear from you. Tell me what you're trying to do, and, space and interest providing, a solution will be published.

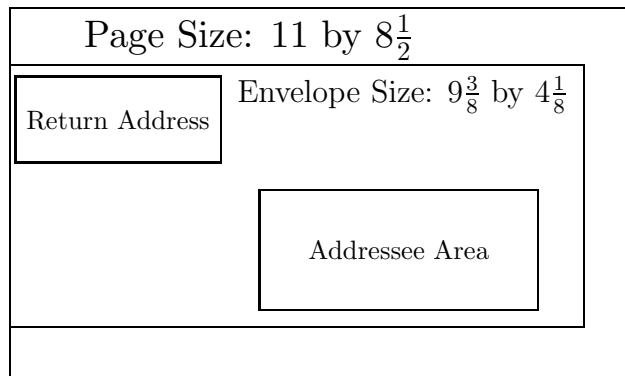
It cannot be emphasized enough how important your input is to TUG. I'm looking forward to seeing your questions/comments!

Q & A: How do I print envelopes?

Laser printers can print envelopes. For those doing mass mailings that need to look really good (no labels on the envelopes!) here are a L^AT_EX and T_EX solutions. Feel free to improve on them.

The problem is that, if you own a laser printer, envelopes can't fit through like regular paper. Instead, you have to turn the envelope sideways, in what's called "landscape" orientation (versus "portrait"). We can set up a page of the appropriate size in L^AT_EX, but how to print that image? If we do a normal print, it will come out "portrait". The solution is to turn the .dvi file sideways as well!

1. Set up the page. Use the code below as a template.
2. Typeset it.
3. Rotate the .dvi file sideways. However it is you print, look in the documentation for an option that rotates your .dvi file to “landscape” orientation or 90°. Examples:
 - (a) emT_EX: the printing program has an option /tr1 (for transformation). For HP LaserJets, use prthplj /tr1 filename.
 - (b) For POSTSCRIPT printers: DVIPS has an option -t landscape. In this case, use dvips -t landscape filename. Your .dvi to POSTSCRIPT program may be different.
4. Print the file!



For L^AT_EX Users

```

\documentstyle[11pt]{article}
\pagestyle{empty}
\setlength{\textheight}{8.5in} % This sets up a landscape envelope
\setlength{\textwidth}{8.8215in}% Horizontal envelope printing area
\setlength{\topmargin}{1.5in} % This leaves a 2.5" margin
\setlength{\headheight}{0in} % No header
\setlength{\headsep}{0in} % No separation since no header
\setlength{\oddsidemargin}{-0.625in} % Leave .375" left margin
\setlength{\parskip}{0in} % No parskip for better control
\setlength{\parindent}{0in} % Ditto
\begin{document}
Robert N. Becker\% Return address area
Department of Mathematics, 2--332\% No box needed because it's

```

```

M.I.T.\% on the left margin
77 Massachusetts Avenue\
Cambridge, MA~02139--4307\[1.25in] % Vertical distance to
% addressee box
\hspace*{4in} % Horizontal distance from left margin
\parbox{4in} % Width of addressee box
{Robert N. Becker\
Department of Mathematics, 2--332\
M.I.T.\
77 Massachusetts Avenue\
Cambridge, MA~02139--4307}
\end{document}

```

For T_EX Users

```

\nopagenumbers % Envelopes don't have numbers
\voffset=-1in % This leaves a 0" top margin
\hoffset=-0.625in % This leaves a 0.375" left margin
\vsizer=6.5in % This sets up a landscape envelope
\hsizer=8.8215in % Horizontal envelope printing area
\topskip=0in % This leaves a 1" margin
\parskip=0in % No paragraph skip for better control
\parindent=0in % No paragraph indent for better control
\topinsert % Skip 2.6875 inches at
\vskip2.6875in % the top of the document
\endinsert
Robert N. Becker\par % Return address
Department of Mathematics, 2--332\par
M.I.T.\par
77 Massachusetts Avenue\par
Cambridge, MA~02139--4307
\vskip1.25in % Vertical distance to addressee box
\strut\hskip4in % Horizontal distance to addressee box
% from the left margin
\vbox{
\hsizer=4in%
Robert N. Becker\par
Department of Mathematics, 2--332\par
M.I.T.\par
77 Massachusetts Avenue\par
Cambridge, MA~02139--4307
}
\bye

```

News from Around . . .

T_EX waves from Estonia

Kauko Saarinen
University of Jyväskylä, Finland
saarinen@jyu.fi

At the beginning of 1992 I had the great fortune of staying at the University of Tartu, in Estonia, for four weeks. The main purpose of my visit was to spread T_EX-related information. I gave two lectures on T_EX, and installed the emT_EX package on a couple of PCs, as a pilot project.

Before my trip to Estonia I was not clearly aware of the current state of affairs with T_EX there. At the University of Tartu T_EX didn't seem to be so popular. However, I heard that someone in Tõravere has been working with T_EX. Tõravere is located some 20 km from Tartu and I was helped in finding my way there, where I had a meeting with Enn Saar, who is working at the Astronomical Observatory of Tõravere. I met Enn and he told me about his T_EX affairs; I quickly noticed that he is a professional user of T_EX.

Enn seemed to be a real gentleman and we had a vivid discussion on T_EX and many other topics. During a walk around the large observatory, he showed me the huge mirror telescope that is one of the biggest in Eastern Europe.

The Estonian diacritic characters

Like most European languages, the Estonian alphabet contains a few letters with diacritics. The extra letters are lower- and uppercase ä, ö, õ, ü, š, ž. The last two of these are used only with words borrowed from other languages. The first step to "estonianize" T_EX is to make it easy to input these local Estonian characters.

Language-specific hyphenation problems

Enn has created Estonian hyphenation patterns based on a large dictionary of 125 000 words. According to him, these patterns work well for Estonian. He has also created virtual fonts in order to output the Estonian characters correctly and to make Estonian hyphenation easy.

Estonian hyphenation is simple in principle if we look at single words. However, this is not the whole truth. In Estonian, compound words are frequently used. In these cases the general hyphenation rules may sometimes fail. The same is true in many other languages as well; for example, in Finnish, my mother tongue.

The T_EX hyphenation command is not so useful here because in Estonian, suffix cases are frequently used, and there are 15 different cases corresponding to prepositions of English. Furthermore, you have singular and plural cases,

too. In Estonian, and especially in Finnish, the T_EX hyphenation command would be much more useful if you had the possibility of using wild characters. For example, `\hyphenation{ulos-ajo*}` could accept all possible suffix cases replacing '*'. I know that T_EX is frozen but nothing prevents me from dreaming of better hyphenation control! I believe that there are many T_EX users who would be satisfied with this feature. In some languages there may be prefixes that would be easier to handle in the same way, I think.

In Finnish we have the same kind of suffix cases as in Estonian, but we also have additional possessive suffix cases. All the general suffix cases are easily handled using the pattern command of T_EX, but there often exist problems with compound words. The real problem is that there is an unpredictable number of compound words in practise. Finally, a very awkward method is needed if you wish to have a good automatic hyphenation of Finnish. You must have a system that recognizes sub-word parts in compound words.

T_EX installations in Estonia

The freely available emT_EX package by Eberhard Mattes is an invaluable tool for T_EX users in Estonia. The emT_EX package runs practically on any PC with a hard disk. The package also contains drivers for many dot matrix printers; these are economically priced printers and common in Estonia, but you seldom see laser printers yet. Eberhard Mattes has also given permission to distribute a subset of emT_EX in Estonia. Many thanks go to him.

According to Enn, many other packages have been tried as well, such as PCT_EX, MLT_EX and SBT_EX. T_EX runs on some UNIX machines too, and on a number of Amigas.

T_EX publications and other activity

T_EX activity in Estonia has greatly increased during the past year (1992). A book, *Väike Eesti T_EXiraamat* or *The Small Estonian T_EXbook*, written by Hans Ibrus was published by Komput.

The preface of the book, written by Enn Saar, contains eight pages of useful information. A key note in the Preface struck my mind. Enn says there that some of the best programs are free and T_EX is a good example of them. The same is true in human life. The best things in life can't be bought by money.

The book contains 144 pages, including appendices. The first appendix is a translation of Arthur L. Samuel's *First Grade T_EX: A Beginner's T_EX Manual*, by permission of TUG.

Another publication is a brochure written by Professor Ülo Kaasik at the University of Tartu. In the autumn of 1992, he also gave a course on T_EX.

The Estonian T_EX User Group was founded in 1992 as well.

I feel that these two publications and the establishment of the Estonian T_EX Users Group form a good basis for further progress of T_EX in Estonia.

Personal experiences

During the happy four weeks in Tartu I had a chance to study more closely the Estonian style of living and make friends with new people. I have a principle to try to speak at least some words of the local language in any foreign country, whenever possible. In Estonia this is easier than in many other countries: the Estonian and Finnish languages are close relatives of one other. They have a common origin and the grammar is much the same. There are also plenty of common words, although many of them have different meanings. This makes studying Estonian very interesting for a Finn. The evaluation here is only mine and a professional linguistic might disagree but it does not bother me at all.

The Estonian people were very kind to me everywhere. Thanks to all of them and special thanks to Jüri Tapfer, manager of the Computing Centre at the University of Tartu, who invited me and helped me in all possible ways.

I later wrote an article about these experiences of my T_EX mission to Estonia in our local newsletter. However, that article would be too long to be included here; furthermore, it was written — in Finnish.

References

- Ibrus, Hans. *Väike Eesti T_EXiraamat*. Tartumaa, Estonia: Komput, 1992. EE-2440 Tartumaa, Tõravere, Observatooriumi 5.
- Kaasik, Ülo. *Trükkimisredaktori T_EX Kasuttamine*. Tartu: Tehe, 1992.

NTG happenings

Kees van der Laan
President, NTG

We have several publications underway this spring. One is David Salomon's courseware, which has grown into a book of some 500 pages. It will be redistributed as a MAPS special (second printing). Apart from that we'll bring out a second booklet — another MAPS special — which will contain our promotional material, to demonstrate with some examples what can be done with T_EX and METAFONT, next to what T_EX (and METAFONT) is all about, and the 'off-the-shelf' public domain set (small version and complete version). Both will be out in May, in addition to our well-filled regular issue, again 150 pages or so.

The NTG's 5th anniversary, its "Lustrum", will be held on June 10th of this year. It is actually the 11th NTG meeting; there are usually two per year. The theme will be "From Font to Book", and it will be held at the Royal Dutch Meteorological Institute, in De Bilt.

In Memoriam: Huub Mulders

Recently, one of the founding members of the NTG passed away. Huub Mulders was a quiet and knowledgeable person, active in the T_EX community, in addition to his other work at the Computing Centre of the University of Tilburg. We will

remember him as a silent force, always there when needed. Huub Mulders was a kind person. We hope his family will find a way to get over this sorrow.

La Lettre GUTenberg

Christina Thiele
Editor, TTN

As announced in the last issue of TTN, the new GUTenberg newsletter has now arrived on the scene; it is expected that the issues will appear every two months. The first issue, no. 0, is a handsome 16-page A4 publication, produced with L^AT_EX, using a font called Rotis (courtesy of Yannis Haralambous), and designed by Éric Picheral and Philippe Louarn. The editors hope that each issue will in fact be produced in a different font. Included in its various sections are an outline history of GUTenberg, the main changes in the new `french.sty` v3.10, and a column ingeniously called “Niouniouses”, which phonetically comes out as “Newnews” — selected items of interest culled from various electronic newsgroups. There are also 3.5 pages devoted to publications about T_EX and/or produced with T_EX. An interesting addition here is a list of bookstores known to stock publications on T_EX, typesetting, and typography.

There is also kind mention of some TUG issues: the latest *TUGboat* is described, as is TTN, and my own new post as president. We wish the editorial team well with the new *Lettre*.

Also to note — there is a new address for GUTenberg: (the place you send your subscription/membership queries to):

Association GUTenberg
P.B. 10
F-93220 GAGNY cedex
`gut@irisa.fr`
Tél: (+33 1) 44 27 71 25

Reports on Meetings

6th Annual Nordic T_EX Users Group Meeting 23 November 1992

Roswitha Graham
Computer Council Projects KTH
S-100 44 Stockholm, Sweden
roswitha@admin.kth.se

Niels G. Mortensen
Risø National Laboratory
DK-4000 Roskilde, Denmark
gylling@risoe.dk

The 6th Annual Nordic T_EX Users Group Meeting was held on 23 November, 1992, in Copenhagen, Denmark and hosted by Peter Busk Laursen, UNI-C. Elections were held and the 91/92 Nordic committee and chair were voted in for another year; an additional member from Denmark, Frank Jensen, Aalborg University, was also welcomed to the board. The 1993 annual meeting is scheduled for November and will be hosted by Martti Nikunen, Department of Mathematics, Helsinki University, Finland.

From activities during 1992 it was reported that Kauko Saarinen, Finland, successfully had been able to support the start of an Estonian user group and will keep in touch with Enn Saar, the chair of the group. Furthermore, KTH, Stockholm, could sponsor Yannis Haralambous who was invited by the University of Vilnius, Lithuania, to help to install a version of T_EX, adapted to the local language.

Meeting programme

The programme for the 1992 meeting was organized under six major headings: *Installations*, *L^AT_EX extensions*, *Applications*, *Future*, *Macros*, and *Organization*.

Installations

The *Installations* session featured three talks. Kresten Krabb Thorup, Aalborg University Centre, introduced an Emacs-based integrated environment for writing L^AT_EX documents in “AUC_TE_X — A front end for L^AT_EX” (published as “GNU Emacs as a Front End to L^AT_EX,” in *TUGboat* 13, no. 3, pp. 304–307).

Next, Ole Carsten Pedersen, UNI-C Copenhagen, presented the concept and design objectives of “A distributed UNIX-based T_EX installation” — an online distribution of ready-to-run public domain UNIX software. This service for workstations was introduced by UNI-C in the autumn of 1992.

Finally, Sven Spanne, Lund University, gave an overview of the use of emT_EX and auxiliary programs at the Departments of Mathematics and Mathematical

Statistics at Lund University and the Lund Institute of Technology: “emT_EX — a public domain T_EX implementation for IBM-compatibles”. The modifications necessary in order to use it for writing Swedish, especially regarding input of the national characters and hyphenation, was also mentioned.

L^AT_EX extensions

Frank Jensen, Aalborg University Centre, provided an introduction to “The New Font Selection Scheme (NFSS)” and discussed the L^AT_EX interface to NFSS for both text and math fonts. He also presented some styles based on NFSS and outlined some of the limitations of NFSS and some ways of overcoming them.

The problems specific to using (L^A)T_EX with the Nordic languages — national letters, hyphenation, diacritical marks, national paper formats and the hard-wired texts in L^AT_EX — were dealt with by Peter Busk Laursen, UNI-C Copenhagen, in “Towards a Nordic T_EX”. He proposed a solution to these problems based on standards: a European T_EX font (Cork encoding), NFSS for the font selection, and Babel style files for hyphenation, paper formats and hard-wired texts. The contents of a standard ‘NordicT_EX’ distribution on one or more Nordic servers were also outlined.

Applications

The only talk in the *Applications* session was “A document archive controller for Sun Sparc/X11 and Windows 3.X — based on database management, hypertext, L^AT_EX and SGML”, given by Hasse Haitto, NADA, Stockholm. The Document Archive Controller (Darc) system supports the creation, re-use, and dissemination of documents through document bases. The multi-user system combines approaches from database management and hypertext systems in a cooperative, network-based, working environment. Darc is implemented in an object-oriented language (C++) for two platforms: Sun Sparc/X11 and PC/MS Windows 3.X. The main components of the system are: a database manager, a translator interface, a hypertext-capable presentation tool, and a virtual filing mechanism.

Future

This year’s invited talk was by Chris Rowley, Open University, Milton Keynes, on “The L^AT_EX 3 Project”.

Macros

The Nordic T_EX Users Group — Denmark, Finland, Iceland, Norway, and Sweden — covers a huge geographical area. Much of the information exchange therefore takes place over computer networks. Jan Michael Rynning, KTH, Stockholm,

gave an overview of the possibilities in “Finding macros on the networks and getting help using them”.

One such generally available macro package was presented by Kristoffer Høgsbro Rose, DIKU, Copenhagen, in “XY-pic — typesetting graphs and diagrams with T_EX”. This macro package was developed to provide an environment in T_EX for typesetting a wide range of graphs and diagrams. Examples of simple and complex diagrams were presented and explained, as well as how XY-pic is installed.

The e-mail address of the Nordic T_EX Users Group is `nordictex@kth.se`.

TUG '93 News Update

Sebastian Rahtz
TUG '93 Committee

The committee of the TUG '93 conference would like to bring you up to date with plans for this summer's big T_EX jamboree at Aston. Booking forms were mailed to all TUG members in mid-March, and are now being sent to members of all other user groups. Readers with Internet access who have not received a form can fetch it using *ftp* from directory `pub/tug93` on `ftp.tex.ac.uk`.

The five magnificent days of the T_EX conference will include:

- A first day introducing T_EX to newcomers; bring your partner and get them to learn your obsession!
- A day on typography and design, in conjunction with the DIDOT project.
- A detailed workshop on L^AT_EX3.
- A session on language and font issues.
- A session on T_EX standards and the future developments of T_EX and related software.
- Discussions of T_EX archives.
- A ‘problem-solving’ panel.
- Birds-of-a-feather groups.

Invited speakers include Christina Thiele, president of TUG, and Joachim Lammarsch, president of DANTE; and Bogusław Jackowski, winner of the ‘best paper’ award at the recent conference in Prague.

Some highlights from the accepted papers by speakers from around the world are:

- The Khmer Script tamed by the Lion (of T_EX): Yannis Haralambous
- Virtual Fonts in a Production Environment: Michael Doob & Craig Platt

- Readability of Math Typesetting: David Murphy
- Russian T_EX Issues; Looking About and Outlook: Irina A Makhovaya
- Beginner's Guide to DSSSL: Martin Bryan
- A PostScript Font Installer Written in T_EX: Alan Jeffrey
- A versatile T_EX Device Driver: Minato Kawaguti
- Typesetting Catalan Texts with T_EX: Gabriel Valiente Feruglio
- Bibliography Prettyprinting and Syntax Checking: Nelson Beebe
- Syntactic Sugar: Kees van der Laan

And we remind you that there is a full week of varied T_EX courses both before and after the conference proper, of which full details can be found on the booking form.

Socially, we can promise delegates that there will be no dull moments at TUG '93, with

- A half-day trip to Shakespeare country, ending with a performance of *King Lear* by the Royal Shakespeare Company
- Evening trips to visit a Chocolate Experience or take part in a bowling tournament
- A T_EX-related competition with prizes
- Receptions and banquets
- The T_EX Users Group business meeting

Do not forget, booking forms returned by **May 15th** can save £15 (\$22.00), as well as guaranteeing a place on the trip to Stratford-upon-Avon.

The first draft programme, with names and titles of all speakers, will be issued by the end of April, and will be circulated widely on networks and by electronic mail.

Courses at TUG '93

Courses will include (L^A)T_EX for PC and Mac users; macros, and output routines; style files; METAFONT logos, and fonts; book design; using non-CM fonts; and T_EX and PostScript. Details on pp. 6–7 of the booking form.

TUG Board Activities

1993 TUG Board Election — First Announcement

The terms of office of the TUG Directors elected in 1991 will come to an end on December 31 of this year. All 15 Board positions will be open for election.

The election schedule has yet to be approved. However, experience gained from the 1991 election — the first in which the entire Board was elected through a mail ballot by the full membership — is being applied to ensure that avoidable problems will not recur.

Nomination will once again be by petition. Candidates and others signing petitions in their behalf must be 1993 members of TUG. Petition forms and the schedule will be published in the next issue of TTN; they will also be available at the annual meeting at Aston, or can be obtained from the TUG office after June 1.

Along with a petition form, each candidate will be asked to supply a passport-size photograph, a short biography, and a statement of intent to be included with the ballot; the biography and statement of intent together may not exceed 400 words.

It is not too early to ask yourself what contribution you could make to TUG as a member of the Board, or if you know other TUG members who would be good representatives of the T_EX community. TUG has undergone a number of changes in the past few years, and continues to evolve. The continued support of active members plays an important role in guiding this evolution.

Barbara Beeton
for the Elections Committee

Next Board Meeting

24–25 July, at TUG '93 Aston University, Birmingham, England

T_EX Users Group 1993 Course Schedule

<i>Beginning/Intermediate T_EX*</i>		<i>Intensive Course in L^AT_EX*</i>	
San Diego	June 14–18	Ottawa	August 23–27
Santa Barbara**	Oct. 18–22	Santa Barbara**	Oct. 25–29
<i>Modifying L^AT_EX Style Files*</i>		<i>Adv'd T_EX and Macro Writing*</i>	
San Diego	June 7–11	San Diego	June 21–25
		Santa Barbara**	Nov. 1–5
<i>T_EX for Publishers</i>		<i>Practical SGML and T_EX*</i>	
New York City	June 9	Santa Barbara**	Nov. 8–9
Washington, DC	Nov. 12		
<i>Book and Document Design with T_EX</i>		<i>SGML and T_EX for Publishers*</i>	
Boston	Sept. 23–24	New York	Nov. 10

*Lab classes — computers will be provided for all students.

**NOTE: These classes, previously scheduled for Boston, have been moved to Santa Barbara.

-
-
- TUG courses are small, with 8–15 students in most classes.
 - Dates and locations subject to change — contact the T_EX Users Group at 805-963-1338 or send a fax to 805-963-8358.
-
-

On-Site Courses in T_EX and L^AT_EX from T_EX Users Group

- Courses in T_EX, L^AT_EX, SGML and T_EX, PostScript, or T_EX for Publishers tailored to the needs of your group
- Courses at every level from beginning to advanced
- Five full days of instruction at your site
- One-week course fee includes all instructor fees and expenses plus textbooks and other materials for up to 15 students

Upcoming Events

11 May	GUTenberg and INALCO (Institut National des Langues et Civilisations Orientales): “T _E X and Arabic script”. 2 rue de Lille, Paris 7e.	Yannis Haralambous yannis@gat.citilille.fr
25 May	UKTUG: Visit to John Wiley and Sons Ltd., Chichester, England	David Murphy d.v.murphy@ computer-science. birmingham.ac.uk
10 June	NTG: 11th Annual Meeting: “From Font to Book”. Royal Dutch Meteorological Inst., De Bilt.	Theo Jurriens taj@astro.rug.nl
16–18 June	SSP93: 15th Annual Meeting: “What Will We Be Tomorrow?” Soci- ety for Scholarly Publishing Hyatt Crystal City, Washington, D.C.	SSP, 10200 W 44th Ave., #304, Wheat Ridge, CO 80033 Tel: 303-422-3914 FAX: 303-422-8894
26–30 July	TUG '93: “World Wide Window on T _E X” 14th Annual Meeting, Aston University, Birmingham, UK.	Chris Rowley, ca_rowley @vax.acs.open.ac.uk Malcolm Clark malcolmc@wmin.ac.uk
15 Aug.	EP94, RIDT94 deadline: Call for papers for major joint conference in Darmstadt, Ger- many, 11–15 April 1994. (see p. 22 for details).	EP94: ep94@gmd.de RIDT94: ridt94@irisa.fr

Note: Also consult the “Calendar” in the previous issue of *TUGboat* for more dates and details.

The A-in-L^AT_EX Contest

Most L^AT_EX users have experienced some disappointment when trying to get the L^AT_EX logo into their documents at smaller-than-normal sizes, or with a font face different from roman.

Currently there are several macros that let you set the L^AT_EX logo. Some print the ‘A’ as a small-cap ‘a’ from a caps-and-small-caps font, while others use the `\scriptsize` capital ‘A’ of the current math family. Some work fine only with 10pt roman and larger; some work fine with several font faces; and some are robust, while others are fragile.

All current TUG members are invited to participate in “The A-in-L^AT_EX Contest”. Participants may enter any of the following contest categories:

- **Basic Solution:** The macro(s) should be simple, easy-to-understand, not necessarily robust, although robustness is a favorable feature.
- **Elegant and Sophisticated Solution:** The macro(s) should exhibit good coding manners, and guarantee complete robustness and reliability.
- **Guru Solution:** The macro(s) can resort to the weirdest and most arcane internal T_EX commands and need not be understandable except by real gurus.

All solutions should be plain-T_EX compatible; it must be specified if the New Font Selection Scheme is required. Additional requirements are that the solution should also work with any other form of (L^A)T_EX that makes use of the extended 256-glyph fonts.

The contest entries must be submitted electronically with the subject line `LaTeX contest` to the contest judges shown below:

North America:	Jackie Damrau	<code>damrau@ssc.vx1.ssc.gov</code>
Elsewhere:	Claudio Beccari	<code>beccari@polito.it</code>

Submissions should be in the form of a complete L^AT_EX source file with the definition for the new logo located in the preamble and accompanied by detailed comments.

Submission deadline: June 15, 1993

The contest winners will be announced and prizes awarded during the T_EX Users Group Annual Meeting, to be held in July at Aston University, Birmingham, UK.

Judges for the contest are: Claudio Beccari, Jackie Damrau, Michael Downes, and Peter Flynn.

T_EX and TUG NEWS

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TUG '93

World Wide Window on T_EX
14th Annual T_EX Users Group Meeting
Aston University, Birmingham, UK
July 26th – 30th, 1993

Aston University in Birmingham (United Kingdom) will be the venue for the 1993 TUG conference. The world-wide aspects of T_EX, L^AT_EX and METAFONT are underlined by holding the conference at one of the main centres of the electronic web outside of North America, whilst windowing systems in various forms allow us to exploit more visually oriented methods of employing the T_EX tools.

The Aston University campus is in central Birmingham, which has excellent travel connections. Birmingham is situated very conveniently for access to all parts of England, especially the Midlands areas including Stratford and Oxford, as well as much of Wales. Social events will include dinners, receptions, and a mystery trip to an unexpected face of Birmingham. Participants will be given details of local events and sightseeing suggestions, including a guide to the culinary treats offered by Birmingham's multi-ethnic society.

The conference will feature the normal paper presentations, whilst workshops, poster displays, courses, panels and 'birds of a feather' sessions will also form integral components. There will be a selection of T_EX Users Group courses organised in conjunction with the meeting, which will take place during the week preceding and the week following the conference proper.

Requests for further information (full details of costs, accommodation options, conference registration forms, etc.), as well as requests for space for demonstrations and displays, should all be sent to the following address, as should completed forms and any other written correspondence:

Peter Abbott *phone:* +44 21 359 5492
Information Services *fax:* +44 21 359 6158
Aston University
Aston Triangle TUG93-Enquiries@Vax.Rhbnc.Ac.Uk
Birmingham B4 7ET
United Kingdom

Full computer facilities, including electronic mail and network connections, will be available to participants. The rich holdings of the UK T_EX Archive will, of course, be easily accessible.

Important details inside: Read more about TUG '93 in this issue (p. 23–24).