

BIJLAGE T**Frequently Asked Questions¹****Version 1.13****Bobby Bodenheimer**

bobby@caltech.bitnet

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Frequently Asked Questions

This article² contains answers to some frequently asked questions on comp.text.tex. Please don't ask these questions again, as they've been answered many times before.

This article includes answers to:

1. Where can I get a DVI to PostScript conversion program?
2. How can I include a PostScript figure in \LaTeX ?
3. Where can I find a DVI previewer for machine Y running Q?
4. Where can I get the manual for ΠCTeX ?
5. What is VorTeX and where can I get it?
6. What is OzTeX and where can I get it (TeX for the Mac)?
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21. How do I get symbols for "the real numbers", "the complex numbers", and so on?
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24. How can I convert from format Y to TeX or \LaTeX , and vice-versa?
25. How do I get a file into the major style repositories?
26. Where can I get font Y?
27. Where can I get a dvi driver for the HP LaserJet?

These are all legitimate questions, but they seem to appear too frequently for long-time readers of the list.

Many of the answers below tell you that you can obtain something through anonymous ftp. Remember that anonymous ftp is a privilege and that the system administrators for these sites have made these files available out of their own generosity. Therefore please restrict your ftp'ing to non-prime hours at the various sites. Also note that Raymond Chen (raymond@math.berkeley.edu) posts a monthly document "Supplementary TeX Information" to this newsgroup which contains other information and software relevant to TeX users but beyond the scope of this article. A \LaTeX version of this article is available via anonymous ftp from ymir.claremont.edu (134.173.4.23) in [anonymous.tex.documentation] and from the other inclusive archives. The most recent version should be available no later than a week from the date of this pos-

¹This article has been adapted by Piet van Oostrum in order to reflect the local situation.

²Deze bijlage bevat een aangepaste versie van de "Frequently asked questions" uit de Usenet nieuwsgroep "comp.text.tex". De aanpassingen bestaan erin dat ftp adressen vervangen zijn door referenties naar de file servers op RUU en HEARN waar mogelijk. De originele tekst en de gerefereerde "Supplementary TeX information" gezamenlijk zijn te verkrijgen op RUU als FAQ/comp.text.tex.

Als in deze file staat: op RUU te verkrijgen als x/y/z (of equivalent: als z in directory x/y), dan kunt u:

- Via ftp archive.cs.ruu.nl [131.211.80.5] de file ophalen als pub/x/y/z.
- Via mail een boodschap sturen naar: mail-server@cs.ruu.nl met als inhoud: send x/y/z

Als u de mail-server niet kent, stuur dan eerst een boodschap met als inhoud: HELP

Als uw mail-verzender niet algemeen geldige adressen genereert dan is het verstandig om een regel op te nemen met als inhoud het woord PATH gevolgd door een adres in internet stijl. Voor gebruikers op BITNET is dat: PATH user@host.bitnet

De files op HEARN zijn te verkrijgen door een boodschap te sturen naar LISTSERV@HEARN.bitnet.

ting.

I would like to acknowledge Don Hosek, Ken Yap, Tomas Rokicki, and Micah Beck, whose postings provided many of the answers. Joe Weening, Hal Perkins, Walter Carlip, Max Hailpern, Tad Guy, Raymond Chen, Henning Schulzrinne, Sebastian Rahtz, Mark James, Peter Galko, and Mike Ernst provided additional material and criticisms. The format of this document is based on that of the Frequently Asked Questions appearing in comp.unix.wizards, and written by Steve Hayman. Any mistakes are mine. Corrections, suggestions, and additions to bobby@hot.caltech.edu.

1 Where can I get a DVI to PostScript conversion program?

Four very nice DVI to PostScript conversion programs that run under Unix are:

- **dvitps** part of the \TeX XPS package by Stephan Bectolsheim.
Available via anonymous ftp from arthur.cs.purdue.edu (128.10.2.1) in ./pub/TeXPS.
- **dvi3ps** by Kevin Coombes.
Available on RUU in TEX/DVI/dvi3ps.tar.Z
- **dvips** by Tomas Rokicki.
This driver is very nice and has the ability to deal with virtual fonts. Available on RUU in TEX/DVI/dvips547.tar.Z, dvipslib.tar.Z, dvipsafm.tar.Z. Dvips ports easily to other operating systems. It is available for VMS via anonymous ftp from ymir.claremont.edu (134.173.4.23) in [.tex.drivers.dvips_new] and also through the DECUS library (see question 22). A precompiled version for MSDOS is available from RUU in TEX/DVI/dvips547_msdos_exes.zip. If you wish to use postscript fonts, get dvipslib.zip as well.
- **dvitops** by James Clark.
Available via anonymous ftp from june.cs.washington.edu (128.95.1.4) in ./tex/dvitops.tar.Z and ymir.claremont.edu (134.173.4.23) in [anonymous.tex.drivers.dvitops]. Dvitops will compile under Unix, MSDOS, VMS, and Primos.

2 How can I include a PostScript figure in \LaTeX ?

Perhaps the best way to do this is to use the psfig macros written by Trevor Darrell. They are available via anonymous ftp from whitechapel.media.mit.edu (18.85.0.125) in ./psfig or linc.cis.upenn.edu (130.91.6.8) in the directory ./dist/psfig. You will also need a dvi to PostScript conversion program that supports `\specials`. The ones mentioned in question 1 do, and the first two drivers come with a version of psfig ready to use with them. The psfig macros work best with Encapsulated

PostScript Files (EPS). In particular, psfig will need the file to have a BoundingBox (see Appendix C of the PostScript Language Reference Manual). If you don't have an EPS file, life can be difficult. For people who don't have ftp access or can't deal with tar files, the files are also available from ymir.claremont.edu (134.173.4.23) in [anonymous.tex.graphics.psfig].

3 Where can I find a DVI previewer for machine Y running Q?

This briefly lists some previewers which are available via anonymous ftp:

- **dvipage** For SunView. Available via anonymous ftp from june.cs.washington.edu (128.95.1.4) in ./tex/dvipages.tar.Z.
- **xtex** For X Windows. Available via anonymous ftp from foobar.colorado.edu (128.138.243.105) in ./pub/SeeTeX/SeeTeX/SeeTeX-2.17.x.tar.Z.
- **dviapollo** For Apollo Domain. Available via anonymous ftp from june.cs.washington.edu in ./tex/dviapollo.tar.Z.
- **dviis** For Integrated Systems. Available via anonymous ftp from june.cs.washington.edu in ./tex/dviis.tar.Z.
- **dvidis** For VAXstation VWS. Available via anonymous ftp from venus.ycc.yale.edu (130.132.1.5) in [.dvidis] (VMS machine).
- **xdvi** Also for X Windows. Available on RUU in TEX/DVI/xdvi.shar.
- **dvitovdu** For Tektronix 4010 and other terminals under Unix. Available via anonymous ftp from wsmr-simtel20.army.mil (26.2.0.74) in the directory pd2:<unix-c.printers> as dvi2vdu.tar-z (ftp in "tenex" mode). A C version is also available from ymir.claremont.edu (134.173.4.23) in [anonymous.tex.drivers.dvitovdu.c-1].
- **dvi2tty** A dvi to ASCII conversion program, for normal terminals. Available from RUU in /TEX/DVI/dvi2tty.shar. I could not get this program to run on a Sun running SunOS 4.1.

4 Where can I get the manual for $\Pi\text{CT}_{\text{E}}\text{X}$?

The $\Pi\text{CT}_{\text{E}}\text{X}$ manual is not free. It is available for \$30 (\$35 with the disk) from the \TeX X Users Group:

\TeX X Users Group
P. O. Box 9506
Providence, RI 02940 (USA)
401-751-7760

tug@math.ams.com

The proceeds from this sale go to Michael Wichura, the author of PiCT_EX, and TUG.

5 What is VorT_EX and where can I get it?

VorT_EX is a package of programs written at the University of California. It includes several nice previewers and some Emacs modes for T_EX and BibT_EX. It is not free. Inquiries should be directed to

vortex@ucbarpa.berkeley.edu

or

Professor Michael A. Harrison
Att. Vortex Dist.
Computer Science Division
University of California
Berkeley, CA 94720

6 What is OzT_EX and where can I get it (T_EX for the Mac)?

OzT_EX is a public domain version of T_EX for the Macintosh. A DVI Previewer and PostScript driver are also included. It should run on any Macintosh Plus, SE, II, or newer model, but will not work on a 128K or 512K Mac. It was written by Andrew Trevor-row, and is available via anonymous ftp from from midway.uchicago.edu (128.135.12.73) in ./pub/OzTeX, which contains other public domain T_EX-related software for the Mac as well. Questions about OzT_EX may be directed to oztex@midway.uchicago.edu.

7 What is Fig and where can I get it?

Fig is a menu driven tool similar to MacDraw that allows you to draw objects on the screen of a Sun Workstation running SunView. TransFig is a set of tools which translate the code fig produces to other graphics languages including PostScript and the L^AT_EX picture environment. Both are available via anonymous ftp from svax.cs.cornell.edu (128.84.254.2) in ./pub/fig. Both Fig and TransFig are also available from the Clarkson archive server at sun.soe.clarkson.edu (see question 19). Both Fig and TransFig are supported by Micah Beck (beck@svax.cs.cornell.edu).

XFig is essentially the same program except that it runs under X Windows. It is available via anonymous ftp from expo.lcs.mit.edu (18.30.0.212) in ./contrib/xfig-2.0.*.Z. Note that version 2.0 is the most recent. It was written by Brian Smith.

For complete compatibility with TransFig, be sure to get at least patchlevel 4 of XFig 2.0.

8 How do I get WEB for C, FORTRAN, or some other language?

There is a version of WEB for C called CWEB written by Silvio Levy. It is available on RUU in the directory TEX/TOOLS/cweb.

There is a version of WEB called Spidery WEB which supports many languages including ADA, awk, and C. It was written by Norman Ramsey and, while not in the public domain, is usable free for research purposes. It is available on RUU in TEX/TOOLS/spiderweb.tar.Z.

There is a version of WEB called FWEB for Fortran, Ratfor, and C written by John Krommes (krommes@lyman.pppl.gov). Version 1.13 is available via anonymous ftp from lyman.pppl.gov (192.55.106.129) in ./pub/fweb.

SchemeWEB is a Unix filter that translates SchemeWEB into L^AT_EX source or Scheme source. It was written by John Ramsdell and is available from the Clarkson archive (see question 19) in ./submit/schemeweb.sh.

All of the above are also available from ymir.claremont.edu (134.173.4.23) in [anonymous.tex.utilities].

9 How can I typeset music in T_EX?

A package called MuT_EX, written by Andrea Steinbach and Angelika Schofer, aids in doing this. It is available on RUU in TEX/MuTeX.tar.Z. This package allows you to typeset single-staff music and lyrics.

A more powerful package which allows the typesetting of orchestral and polyphonic music is MusicT_EX, written by Daniel Taupin. It is also available on RUU as TEX/musictex.tar.Z

10 What is TUG and TUGboat?

TUG is the T_EX User's Group. TUGboat is their newsletter, which publishes useful articles about T_EX and METAFONT. Inquiries should be directed to:

T_EX Users Group
P. O. Box 9506
Providence, RI 02940 (USA)
401-751-7760
tug@math.ams.com

11 How do I convert Adobe's afm files to tfm format?

Use the afm2tfm program distributed with dvips (see Question 1)

For the Macintosh, there is a program called EdMetrics which does the job (and more).

It is available free from:

Blue Sky Research
534 Southwest Third Avenue
Portland, Oregon 97204 (USA)
800-622-8398 or 503-222-9571

12 In \LaTeX , how do I get a double-spaced document?

One way is to change the value of `\baselinestretch` to 2 or 1.5 with the command `\renewcommand{\baselinestretch}{2}`. A better way is to use the `doublespace` style file `doublespace.sty` on RUU in `TEX/latexstyle/` or, if you are using the new font selection scheme, get the `doublespace.sty` from `yimir.claremont.edu` (134.173.4.23) in `[anonymous.tex.inputs.latex-contrib]`.

13 In \LaTeX , how do I include a file in the verbatim environment?

A good way to do this is to use Rainer Schoepf's `verbatim.sty`, which provides the command `\verbatiminput` that takes a file as an argument. This file is available on RUU in `TEX/latexstyle/verbatim.zoo`

Another way to do this is to use the `alltt` environment defined in the style file `alltt.sty` available in `TEX/latexstyle/` on RUU.

14 In \LaTeX , how do I do Y?

If you can't figure out how to do something in \LaTeX after you have read the manual very carefully, asked your local \LaTeX guru, and thought about it, there is a \LaTeX help service available. Please note that the way to accomplish something in \LaTeX is often by using an appropriate style file, so please check this also (see question 15). If none of this works, send mail describing your problem to `latex-help@cs.stanford.edu`. If you haven't gotten a reply to your problem within about a week, send mail to `latex-help-coordinator@cs.stanford.edu`.

15 Where can I find a \LaTeX style file for doing Y?

Before you ask for a \LaTeX style file to do something, please check the \LaTeX style collection at RUU in `TEX/latexstyle`. It should be noted that the basic \LaTeX style files are available on RUU in the directory `TEX/TEX3/latex/` and on HEARN as `LATEXSRC UUE`, while `latexstyle` contains only supplementary style files.

16 How do I generate an index in \TeX / \LaTeX ?

Making an index is not trivial. There are several indexing programs which aid in doing this. Some are:

- **makeindex**
For \LaTeX under Unix (but runs under other OS's without changes). Available on RUU in `TEX/TOOLS/makeidx`. A version for the Macintosh is available from Johnny Tolliver at `tolliver%atf.mfenet@nmfecc.llnl.gov`.
- **idxtex**
For \LaTeX under VMS. Available via anonymous ftp from `yimir.claremont.edu` in the directory `[.tex.utilities.idxtex]`.
- **texix**
For \TeX on CMS and Macintosh machines. Available via anonymous ftp from `yimir.claremont.edu` in the directory `[.tex.utilities.texix]`.
- **indexor**
For \LaTeX under Unix, VMS, and DOS. Available via anonymous ftp from `yimir.claremont.edu` in `[.tex.utilities.indexor]`.

17 How do I get METAFONT to do what I want it to do?

METAFONT allows you to create your own fonts, and ordinary \TeX users will never need to use it. METAFONT, unlike \TeX , requires some customization. Each output device for which you will be generating fonts needs a mode associated with it. Modes are defined using the `mode_def` convention described on page 94 of 'The METAFONTbook'. So first create a file, which we will call `local.mf`, containing all the `mode_defs` you will be using. The file `waits.mf` (in the standard distribution or available on RUU in `TEX/TEX3/lib`) is a good starting point for this. Listings of settings for various output devices are also published periodically in TUGboat (see question 10). Now create a plain base file using `inimf`, `plain.mf`, and `local.mf`:

```
% inimf
This is METAFONT....
**plain          # you type plain
(output)
*input local     # you type this
(output)
*dump            # you type this
Beginning to dump on file plain....
(output)
%
```

This should create a base file named `plain.base` (or something close) and should be moved to the directory which contains the base files on your system.

Now we need to make sure that METAFONT loads this base when it starts up. If METAFONT loads the plain

base by default on your system, then you're ready to go. Under Unix, we might, for instance define a command `mf` which executes "`virmf &plain,`" loading the plain base file.

The usual way to create a font with plain METAFONT is to then start it with the line

```
\mode=<mode name>;
mag=<magnification>;
input <font file name>
```

in response to the `*` prompt or on the METAFONT command line. If `<mode name>` is unknown or omitted, then the mode defaults to proof mode. If this has happened METAFONT will produce an output file called `.2602gf`. The `<magnification>` is a floating point number or magstep (magsteps are defined in 'The METAFONTbook' and 'The T_EXbook'). If `mag=<magnification>` is omitted, then the default is 1. For example, to generate `cmr10` at 12pt for an epson printer you would type

```
\mode=epson; mag=1.2; input cmr10
```

Note that under Unix the `'\'` and `';` characters must usually be escaped, so that this would typically look something like

```
mf \\mode=epson\; mag=1.2\; input cmr10
```

If you don't have `inimf` or need a special mode that isn't in the base, you can put its commands in a file (e.g., `ln03.mf`) and invoke it on the fly with the `\smode` command. For example, to create `ln03.300gf` for an LN03 printer, using the file

```
% This is ln03.mf as of 2/27/90
% mode_def courtesy of John Sauter
proofing:=0;
fontmaking:=1;
tracingtitles:=0;
pixels_per_inch:=300;
blacker:=0.65;
fillin:=-0.1;
o_correction:=.5;
      (note the absence of the mode_def
      and enddef commands), we would type
mf \smode="ln03"; input cmr10
```

18 Where do I get T_EX/L^AT_EX for machine Y running Q?

- **Unix**

The Unix T_EX distribution is available for anonymous ftp from `labrea.stanford.edu` (36.8.0.47) in the directory `./tex/unix`. It is large, so please be sure to observe proper ftp etiquette when getting it. It is also available through the University of Washington, for a small fee. Contact:

Director

Northwest Computing Support Center
Thomson Hall, Mail Stop DR-10
University of Washington
Seattle, WA 98195 (USA)
(206)543-6259

or send electronic mail to Elizabeth Tachikawa at `elisabet@max.u.washington.edu` (note the "s"). The fee charged for getting the T_EX distribution through the University of Washington helps fund the further development of Unix T_EX, so it's a good idea to order it this way. This distribution compiles under Ultrix. Executables for the 386/ix are available via anonymous ftp from `tik.vtt.fi` (130.188.52.2) in `./pub/tex/bin-386ix` and from `math.berkeley.edu` (128.32.183.94) in `./pub/tex386ix.tar.Z`.

- **PC**

A T_EX package for the PC, including L^AT_EX, BibT_EX, previewers, and drivers is available via anonymous ftp from `vax.eedsp.gatech.edu` (130.207.226.2) in `./pub/TeX`. The variety here is sbT_EX version 30 by Wayne Sullivan. EmT_EX, another T_EX package for the PC by Eberhard Mattes, is available on RUU in `TEX/emtex`. This package includes L^AT_EX, METAFONT, BibT_EX, etc., as well. Documentation is available in both German and English.

All Public Domain T_EX software for the PC is also available through

Jon Radel
P. O. Box 2276
Reston, VA 22090
`jonradel@phoenix.princeton.edu`

Send a self-addressed stamped envelope with 10 sheets of paper or \$2.00 to obtain information on what's available.

- **Mac**

See question 6 for a public domain version.

- **TOPS-20**

T_EX was originally written on a DEC-10 under WAITS, and so was easily ported to TOPS-20. A Distribution that runs on TOPS-20 is available via anonymous ftp from `science.utah.edu` (128.110.198.2) in `./pub/tex/pub/web`.

- **VAX/VMS**

VMS executables are available via anonymous ftp from `yimir.claremont.edu` (134.173.4.23) in `[.tex.exe]`. Source is available in `[.tex.sources]`. Version 3.1 is available in `[.tex.sources.tex3_1]`. Yimir has a mailserver for those without ftp access, although executables are not available through it. Send a message containing the line "help" to `mailserv@yimir.claremont.edu`. Standard tape distribution is through DECUS or Maria Code.

- **Atari**

T_EX is available for the Atari ST on RUU in `ATARI-ST/tex/`

- **Amiga**

Disk 1 of the Amiga CommonT_EX distribution is available via anonymous ftp from `ab20.larc.nasa.gov` (128.155.23.64) in `./amiga/commontex.lzh`. The file

copying.tex in the distribution contains information on how to obtain the other disks. Also, experimental versions of T_EX 3.1 and METAFONT 2.7 are available in ./incoming/amiga/TEX.

- **Tandy 6000**

First get web2c-5.8a and web-5.8a from ics.uci.edu (128.195.1.1) in ./TeX and then apply the diffs available and plains.ndsu.nodak.edu (134.129.111.64) in ./pub/tandy/programming and build. This builds T_EX 3.1 and METAFONT 2.7.

19 What is the Clarkson archive server?

The Clarkson archive server is a program that allows you to retrieve files via electronic mail. So it provides a way of getting many neat things if you don't have anonymous ftp. To get the archive server to do something you should send a message to archive-server@sun.soe.clarkson.edu (128.153.12.3). To get started using it, send the archive server a one line message "help" (case is unimportant). It will send you back a file describing how to use it more fully.

In particular, the Clarkson archive contains, among other things, a repository for L^AT_EX style files, AMST_EX macros and style files, BibT_EX style files, PiC_T_EX source (not the manual, see question 4), back issues of T_EXhax and T_EXMaG, files from TUGboat, and source to T_EX, L^AT_EX, WEB, and various utilities. The archive is maintained by Michael DeCorte.

If anonymous ftp is available to you, you may get the files directly from sun.soe.clarkson.edu.

If you have problems, contact archive-management@sun.soe.clarkson.edu.

Ymir.claremont.edu (134.173.4.23) is also a T_EX repository with lots of other stuff as well. It can be reached with anonymous ftp and also has a mailing program for people without anonymous ftp. See question 22 for more information.

20 Where can I get a thesis style for L^AT_EX?

Thesis styles are usually very specific to your University, so it's usually not profitable to ask the whole newsgroup for one. If you want to write your own, a good place to start is the ucthesis style available in the L^AT_EX style collection

(see questions 15 and 19).

21 How do I get symbols for "the real numbers", "the complex numbers", and so on?

These symbols are known as "blackboard bold" and are available in the recently released AMS fonts "msam" (e.g., "msam10" for 10pt) and "msbm". They replace the older "msxm" and "msym." The fonts have a large number of mathematical symbols to supplement the ones provided by T_EX. The fonts are available on RUU in the directory TEX/AMS/amsfonts and on HEARN as AMS-FONTS UU1 ... AMSFONTS UUA Two files which load the fonts and define the symbols are provided, and both work with either T_EX or L^AT_EX. Additionally a replacement for the old amssymbols.sty file using the new fonts was posted by Tony Li on August 13, 1990, but does not seem to have made it into the major style repositories. Questions or suggestions regarding these fonts should be directed to tech-support@math.ams.com.

22 How do I get T_EX material if I do not have access to anonymous ftp?

There are several mail servers available, i.e., programs that will send you files via electronic mail. Some are:

- The mail server at Clarkson (see question 19), if you can send mail to the United States.
- Also in the US, the mail server at ymir.claremont.edu has access to all the T_EX-related material there. This site has a lot of the PD T_EX software, and even if it's not explicitly stated, much of the software mentioned in this document is available there. Unfortunately, executables are not available through the mail server. Send a message containing the line "help" to MAILSERV@ymir.claremont.edu.
- In the United Kingdom, you can get T_EX-related material from the UK T_EX archive at the University of Aston. (FTP access is also available for people on JANET:

```
Site uk.ac.tex
Username public
Password public
Top Level tex-archive
```

A known file is [tex-archive]000directory.list.) For electronic mail access, send a message to texserver@uk.ac.tex. The first non-blank line of the message must contain a valid T_EXserver command (help, directory, files, whereis, search, or path). The program will then mail you a response notifying you that your request has been received. If you fail to get a response from the T_EXserver, you may need to use the path command to help the program out. For Internet users the return address is of the form name%site@nsfnet-relay, while for Bitnet and EARN it is name%site@earn-relay (i.e., include a line that says "path name%site@nsfnet-relay along with a line

containing "help"). Note that the old three hyphen format is obsolete, but still accepted by the program for backward compatibility.

- archive.cs.ruu.nl (131.211.80.5) also contains a substantial T_EX archive (ftp access is available). Send a message containing the line "help" to mail-server@cs.ruu.nl. This mail server can send binary files in a variety of different formats.
- There are LISTSERV facilities for T_EX at LISTSERV@DHDURZ1.BITNET. Send a message containing the line "help" to this address.
- For users on BITNET, access to anonymous ftp for some files can be obtained indirectly by sending mail to BITFTP@PUCC.BITNET. Send a message containing the line "help" to this address for more information.

There is also the DECUS T_EX collection, a collection of T_EX material for VMS, Unix, MS-DOS, and the Macintosh. It can be obtained from the DECUS Library (reference number VS0058) in the US, or through your DECUS office outside of the US. To contact the DECUS Library, send mail or call:

The DECUS Program Library
219 Boston Post Road BP02
Marlboro, MA 01752-1850
(508)480-3418

or send electronic mail to the DECUS T_EX Collection Editor, Ted Nieland, at decus_tex@nieland.dayton.oh.us.

Another good source of information is NETWORK SOURCES OF T_EX WARE by Peter Flynn which appeared in T_EXhax, volume 90, issues 45-47 (in May 1990).

23 How do I use PostScript fonts with L^AT_EX?

There are at least four problems with replacing the standard Computer Modern fonts used in L^AT_EX:

1. The fonts are defined in a long set of macros in lfonts.tex which are not easy to understand and change;
2. You must have a device driver capable of understanding the idea of fonts built into the printer (all the drivers referred to in question 1 have this capability).
3. The default layout of the Adobe fonts is NOT the same as that for the CMR fonts, so you will not get the right characters (ligatures being a good example).
4. The official names of the PostScript fonts are long and in both upper and lower cases. While this presents no problems for Unix, it can cause problems with files under DOS, VMS, etc.

The first problem can be solved by one of:

1. Going through lfonts.tex and changing references to CMR to some new font, e.g., times.

2. Overloading the definitions of \bf, \rm, etc., with new font families.
3. Using the font selection mechanism described in TUGboat 10.3, p. 222 ff; a L^AT_EX interface to this will be part of version 2.10 of L^AT_EX, and is currently available. From RUU get the file TEX/latexstyle/fontsels.zoo.

The second problem is quickly disappearing since all recent DVI to PostScript drivers have had adequate facilities. The third problem can be solved by:

1. Changing T_EX macros, etc., so that the Adobe font layouts are expected.
2. Re-encoding the Adobe fonts in a PostScript prolog so that they conform to T_EX standards.
3. Using "virtual fonts" to perform the mapping between Adobe and T_EX layouts. Tomas Rokicki's dvips driver (see question 1) has examples of this.

A definitive statement on short names for Adobe fonts is expected soon. Meanwhile, there is not much agreement on how to compress Garamond-LightItalic into 8 characters.

24 How can I convert from format Y to T_EX or L^AT_EX, and vice-versa?

• troff

troff-to-latex.tar.Z is available on RUU in TEX/TOOLS/troff-to-latex.tar.Z. This program, written by Kamal Al-Yahya at Stanford, assists in the translation of a troff document into L^AT_EX format. It recognizes most -ms and -man macros, plus most eqn and some tbl preprocessor commands. Anything fancier than that needs to be done by hand. Two style files are provided. There is also a man page (which converts very well to L^AT_EX :-). The program is copyrighted but free. The DECUS T_EX distribution (see question 22) also contains a program which converts troff to T_EX.

• scribe

Mark James has a copy of scribe2latex which he has been unable to test but which he will let anyone interested have. Send email to mark@bdbluess.altair.fr. The program was written by Van Jacobson of Lawrence Berkeley Laboratory.

• wordperfect

wp2latex.zip is available on RUU in TEX/TOOLS/wp2latex.arc and on HEARN as WP2LATEX.UUE. This is a PC program written in Turbo Pascal by R. C. Houtepen at the Eindhoven University in the Netherlands. It converts WordPerfect 5.0 documents to L^AT_EX. Pascal and (on RUU) C source is included. Users find it "helpful" and "decent" in spite of some limitations. It gets high marks for handling font changes. Limitations include no indices, table of contents, margins or graphics. It also

won't handle all the new features of WordPerfect 5.1, in particular the equation formatter. The program is copyrighted but free.

- **PC-Write**
pcwritex.arc is available on wuarchive.wustl.edu (128.252.135.4) in directory mirrors/msdos/tex and on wsmr-simtel20.army.mil (26.2.0.74) in directory pd1:<msdos.tex>. This is a print driver for PC-Write that "prints" a PC-Write V2.71 document to a T_EX-compatible disk file. It was written by Peter Flynn at University College, Cork, Ireland. It is public domain.
- **runoff**
Peter Vanroose, of the University of Leuven, Belgium, has written a RUNOFF-to-T_EX conversion program in VMS Pascal. It is available from comp.text archives (they do exist, don't they? The program was submitted in December 1987) or from the author (peter@dit.lth.se) or from Mark James (mark@bdblu.es.altair.fr).
- **refer/Tib**
There are a few programs for converting bibliographic data between BibT_EX and refer/Tib formats. They are available via anonymous ftp from wheaties.ai.mit.edu (128.52.32.13) in the directory ./refer-to-bibtex. In spite of the directory name, it also contains a shell script to convert BibT_EX to REFER as well. This collection is maintained by Thomas M. Breuel (tmb@ai.mit.edu).

In addition, a group at Ohio State University is working on a common document format based on SGML. In theory any format could be translated to or from this one. Also, Framemaker supposedly has "import filters" to aid in the translation from alien formats (presumably including T_EX) to Framemaker; perhaps other desktop publishing programs have similar things.

25 How do I get a file into the major style repositories?

Use anonymous ftp to fenris.claremont.edu (134.173.4.146) and transfer the file into the directory ./pub/tex-incoming. Then send notification to tex-group@hmcvax.claremont.edu. If the file is large, it's better to send the note before transferring the file. From there it will propagate to other inclusive archives.

26 Where can I get font Y?

A comprehensive list of METAFONT fonts is posted to Comp.fonts about once every six weeks by Lee Quin (lee@sq.sq.com). It contains both commercial fonts and fonts available via anonymous ftp. Most of the fonts available via anonymous ftp are available from ymir.claremont.edu (134.173.4.23). Also, the file wujastyk.txh on ymir.claremont.edu in [anonymous.tex.mf] is a copy of Dominik Wujastyk's font article, and contains information on METAFONT fonts as well.

27 Where can I get a dvi driver for the HP LaserJet?

PC - The emT_EX package mentioned in question 18 contains a driver for the LaserJet, dvihplj. The driver is available by itself from RUU in TEX/emtex/disk3 in the files dvidrv[123].zip.

See also TEX/DVI/dvi2lj.arc on RUU.

Version 2.10 of the Beebe drivers support the LaserJet. These drivers will compile under Unix, VMS, and on the Atari ST and DEC-20's. They are available from science.utah.edu (128.110.198.2) in ./pub/tex/dvi and from ymir.claremont.edu (134.173.4.23) in [tex.drivers.beebe2_10].