meant both that there were fewer cases of "I don't know" and there was a transcript to be published in the Proceedings. We were happy with the success of this approach, and are using it again this year. If you have any good general questions, or ones that you think would be instructive, or even specific problems that you've tried for a long time to solve without success, send them in, and we will do our best. For presentation at the meeting, questions that have relatively short answers will be favored, but all questions will be published, along with whatever answers we can dig up.

If you have e-mail access, send your questions to `TUG-Q@TAMVM1.Bitnet` or to `TUG-Q@TAMVM1.TAMU.edu`. If you have to use paper, write to "TUG91 Q&A Session" in care of the TUG office (the first address on page 203).

I expect to see many familiar TeX users in Dedham, and hope to meet many new ones as well.

TeX in Germany

Walter A. Obermiller

Göttingen was the place to be for TeX users and implementors, as the 9. annual meeting of the German-language TeX users was held from October 10–12, 1990. Formerly in a geographically "marginal" position, the old university town Göttingen is now located in the center of Germany. Approximately 150 participants from Germany, Austria, Belgium and the UK attended the meeting. It was jointly sponsored and organized by the German-language TeX-users group DANTE and the German Society for Scientific Computing (GWDG), which is based in Göttingen.

In the wake of the meeting, the 3. member conference of DANTE was held in the afternoon on Oct 10. Chairman Joachim Lammarsch presented an encouraging outlook on DANTE's future. DANTE has had a *boom* year; membership increased from 150 at the beginning of 1990 to a staggering 858 with another 100 applications still pending. These figures and the age structure, with students prevailing, show that DANTE is doing its part to promote TeX in Germany.

The TeX server in Heidelberg has been complemented by the DANTE FTP-server at the University of Stuttgart which stocks a fine collection of TeX programs, amongst it emTeX. Additionally DANTE is making efforts to distribute TeX to people not in the possession of a network connection.

Talks were scheduled for Oct. 11, beginning with a review by Joachim Schrod on the unholy marriage of non-standard font files and drivers not conforming to the TUG driver committee standards. The combination of two non-standard components may work, but often as a nonstandard font and a standard dvi-driver are used, problems arise. Character spacings will be incorrect and significantly degrade the readability of output. Unfortunately, even commercial implementations of drivers have these problems.

Peter Abbot presented the usage statistics of the Aston Archive-Server for the last months. Problems with the Rutherford gateway into BITNET still persist but are tackled with a new encoding scheme (`vvencode`) which is under development at Aston. Some participants surmised the problems were caused by left lane traffic in the UK part of the BITNET cable....

Applications of LaTeX control statements, as in `ifthen.sty`, were discussed in a talk by H. Kopka. It was followed by a report by A. Lingnau on the development of an online documentation system for mathematical software using LaTeX as the typesetting engine.

An approach to documenting LaTeX style files was presented by W. Kaspar and received lively attention of the audience. Many of the available style files out there lack documentation. The solution is not as trivial as it seems. For example, copyright issues make documentation of certain styles *within* the style file itself a contentious issue. The goal of the discussion was to design a multilingual documentation format for style files, and a style file to print them. The documentation should include information on other required styles and style combination that cause problems.

Some 30 popular LaTeX style files have been documented by volunteers in this manner and efforts are under way to compile a complete list of styles available. It was decided to pull different approaches together until the next German TeX meeting in Vienna (Feb. 20–22, 1991) and resume discussion.

Urs Widmer informed on the use of TeX in typesetting Chinese and Japanese texts, highlighting problems with the fonts and the many different character encoding schemes in use for Chinese, Japanese and Korean.

Merits and some problems of producing texts with diacritical marks and multilingual editions using TeX were shown by G. Koch in examples from Hebrew texts and bilingual book projects.

Philosophical and technical insights into printing old German documents with appropriate old fonts were presented by Yannis Haralambous. He introduced old German Fraktur, Gotisch, Schwabacher and Initialen fonts he created with METAFONT, and showed old German works of print he has typeset in them. The fonts are *fontastic*! Yannis will make them available in Heidelberg soon.

G. Bienek announced the availability of a new TeX bulletin board. It is accessible under the number +49-8024-8416 and will carry the offerings of the normal DANTE distribution.

A new twist to including graphics in TeX documents was introduced by F. Sowa. A preprocessor converts Tag Image File Format (TIFF) graphic files into a .pk font file which is then simply printed by including a .tex file also produced in the process. The bitmap is distributed over a number of characters, so even old drivers should be able to handle them. His graphic inclusion mechanism hence does not require the use of a \special. The preprocessor is capable of dealing with simple bitmaps and has dithering capabilities to deal with grayscale and RGB pictures.

From the user interface "department", L.P. Kurdelski presented a Smalltalk based system to simplify the creation and processing of TeX documents on PCs and their output via printers connected to a heterogeneous network, so as to relieve the user from having to deal with DOS or network software.

The final day of the meeting had four tutorials on the agenda. H. Kopka introduced the use of PiCTeX macros, while B. Burr gave an introductory LaTeX tutorial. A tutorial on how to change LaTeX style files (H. Partl) and one on METAFONT (F. Sowa) were followed by a final discussion.

Conclusion

Many different uses of TeX in Germany are reflected by the talks outlined above. As more and more people are using TeX here, many more will be thought of. As all TeX meetings that I have attended this meeting too was very short.

The challenges for the immediate future are clear: introduction of the new 256 character Latin fonts, for which the encoding scheme has been tentatively approved at the Cork meeting. Only new German hyphenation patterns and a revised german.sty will then be needed to make full use

of TeX's hyphenation capabilities for German language texts.

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Philology

Russian TeX

Basil Malyshev, Alexander Samarin and Dimitri Vulis

For processing Russian texts [1] by TeX one should adjust TeX to use: Russian language hyphenation, coding of the Russian characters, and fonts with the cyrillic symbols.

TeX 3.0 can be adjusted without changes!

The hyphenation patterns described in [2] are used for Russian language. Actually TeX is bilingual — the Russian and English hyphenation patterns are loaded by following file:

```
\language=0          % English
\lefthyphenmin=2
\righthyphenmin=3
\input ehyphen.tex
\language=1          % Russian
\lefthyphenmin=2
\righthyphenmin=2
\input cyrdef.tex
\input rhyphen.tex
\language=0          % English as default
```

In the file cyrdef.tex proper catcode, uccode, lccode and mathcode are set for cyrillic characters.

Switching between Russian and English hyphenation is performing by \language: setting \language=0 means English, \language=1 means Russian. English words are not hyphenated if the Russian patterns are active and reversely. Another possibility is to merge the English and Russian hyphenation patterns as a single language.