

(Cyr)TUG 96, and some more

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Perfect, just one word. ‘Atlichna,’ dear Russian friends. Have you ever attended a TUG meeting and welcomed by real fire-works? Well, the Russians did.

A social event? As said the very first evening, while strolling along the Volga promenade, we had a disco and fire-works, to start with, to come in the right mood. The next evening we were welcomed officialy via a welcome dinner à la Russe, with many a toast and a dance or two afterwards, ‘kanechna,’ dear Russian friends.

The trip to Sergijev Posad was great and the flat tyre on the return was there to test our survival capabilities. Ever heard of a survival outing at a TUG meeting? Well, the Russians did.

And what about the trip to the old town Kimra while it was raining cats and dogs? The local museum devoted to life through the ages could be visited at leisure. Then there was the boattrip under a blue sky up and down the Wolga, with the picnic and delicious ‘shashlik’ afterwards with ample drinks, not to forget the Vodka and wine.

Buying souvenirs in Russia can be strainuous. Not during this conference however. Each morning next to the conference room door souvenirs were offered, to ease the looking for them by the participants. Last but not least there was the guided tour through Moscow. Thank you friends, no travel agency could have done better. How Should I ever have known about the ‘Poklony Gora?’ As said ‘atlichna.’

But, ... it’s not about a tourist trip, a TUG meeting was at stake. So let us go back to business.

A very modest TUG meeting with 80 odd participants. During the opening ceremony Irina Makhovaya depicted lucidly the coming of age of CyrTUG. Within three years the group has matured. Bravo! CyrTUG has solved the problems of adapting \TeX to handle cyrillics, and enjoys outstanding \TeX ies as members. Sasha Berdnikov earned the TUG price for his contributions. Do we have to say more? The group has 700 members with Knuth as honorary member 314.

A snapshot of the contributions

Yannis Haralambous’ talk about Arabic an \TeX was a bit too much. He explained a lot about Arabic characters and typography, nothing about \TeX or METAFONT.

Next Sergej Znamenskii described the various font encodings that are currently being used for cyrillic.

Then Olga Lapko explained that cyrillic \neq cyrillic, but many languages. She also showed that even in the Unicode table some characters are missing.¹

Karel Píška showed how cyrillic alphabets are ordered, and explained what problems are involded with that.

The DC fonts are moving towards stability and completeness. Jörg Knappen presented version 1.3 of these fonts, in which several details have been improved, such as accents on capitals.

Jörg also presented a paper by Fukui Rei about TIPA, a system for processing phonetic symbols in \LaTeX . The package includes a complete rewrite of METAFONT sources and macros, based on the old 7 bits version.

In the evening there was the dinner party with lots of good food, vodka, wine, toasts and speeches. Gabriel Valiente Feruglio announced that he is willing to host the next meeting in Barcelona!

Yannis Haralambous then showed us a new development in the Ω system: the fonts Ω Times and Ω Helvetica.

Unicode was also the theme of Richard Kinch’s lecture. He explained the advantages of extending \TeX to Unicode. He implemented Unicode features in his True \TeX system.

Sasha Berdnikov demonstrated a new approach to CM fonts: they can be implemented as Multiple Master fonts, so any degree of (sans-)serifeness or boldness can be obtained by abstracting from the 70 odd METAFONT parameters that define the shape of the characters.

Since Sasha has also done a lot of work in the field of virtual font management his next lecture was on an update of the program VFComb. The documentation is also available in English now on CTAN.

Interplatform compatibility is a serious problem, even with \TeX documents, because of different code pages that people use. Peter Ovchenkov explained the problems specific for cyrillic texts.

Then Dag Langyhr revealed his project ‘Star \TeX ’ which is an HTML-like shell around \TeX -commands. It’s an educational markup language that protects students against unintended use of unknown commands. It will also give more sensible error messages, and even do some error recovery.

Gabriel Valiente Feruglio made a survey of scientific journals that accept \LaTeX submissions, and explained the pros and cons of electronic submission of papers.

\TeX and related programs are not for the faint hearted. Sergej Znamenskii showed us a new approach with a user friendly interface, using some built-in ‘intelligence’.

The Russian typographer Mikhail Grinchuk introduced us Russian traditions of typesetting. Many details such as punctuation, quotes, cdots, ldots and dashes are different from ‘the west’. Some of them are very hard (impossible?) to implement in \TeX .

¹It is rumoured that the CyrTUG people did solve their problems with cyrillics during this conference. The following anecdote is attributed to Oleg Khristenko: ‘Olga Lapko should come up with a new font encoding or had to marry him.’

‘DVI-based electronic publication’ is the way to go, according to Laurent Siebenman. He evaluated several potential electronic formats and found the dvi format to be most suited, although some problems still have to be solved (e.g. fonts, graphics).

Sergej Strelkov explained how to make indexes for VINI-TI’s Mathematical Abstract Journal. He uses L^AT_EX2.09, Perl, MakeIndex and DVIsPELL in a rather complex scheme that was quite difficult to follow. Fortunately, most of the process is automated.

‘Graphics and T_EX’ is a theme on almost any T_EX meeting. Now it was Kees van der Laan’s turn to show that, as he puts it, ‘a child can do it’, using his Turtle Graphics macros.

Kees is also involved in producing graphics by META-FONT and MetaPost, and he showed us some beautiful examples generated from remarkably elegant code.

Petr Sojka then informed us about the latest developments in the project of adapting T_EX to write PDF instead of DVI output. His DVI2PDF program is based on change files to the original T_EX WEB sources. The program is in α -test now (July 1996). Some features are not yet implemented (e.g. the ‘hyperref’ links, bitmapped fonts and graphics), but will certainly be added later. More information is available from <http://www.cstug.cz/~thanh/tex2pdf>.

PDF is a hot issue. Sergej Lesenko showed us another approach to generating PDF. His program DVI2PDF is based on Thomas Rockiki’s DVIPS. It already features rotated and scaled text, graphics (BMP and JPEG), annotations and bookmarks, partial font loading, and color. EPS graphics are not yet supported, and neither are bitmapped fonts and thumbnails. No report in the (pre)proceedings but it will appear later.

Yurij Ivanov then gave a lecture on text processing at JINR, the Joint Institute for Nuclear Research, which was hosting the conference. Needless to say that they use T_EX a lot and are very happy with it.

Andrej Slepukhin showed us methods of multilingual text processing.²

At several other T_EX meetings Michel Goossens has already shared with us his knowledge about the process of converting L^AT_EX into HTML and back. In his lecture about L^AT_EX and the Internet he informed us about several programs that are useful in this context. e.g. HTML2L^AT_EX (originally from Nikos Drakos) and TYPEHTML (from David Carlisle, which enables T_EX to typeset HTML directly).

Andrej Astrelin showed us his work on programming graphic objects (such as lines, arcs and splines) in C++. The relevance for T_EX users still escapes us, as we now have so many alternatives like MetaPost and other drawing tools.

L^AT_EX’s picture environment is powerful, but not perfect. Sasha Berdnikov extended the picture environment with useful macros and also pointed out some problems that still need to be dealt with, e.g. big arrows, double lines and dotted/dashed lines.

Kees van der Laan explained to the audience his BLUe system as a ‘mental tool’. He gave an overview of its functionality, and announced that he has finished the user’s guide – Publishing with T_EX – next to the technical documentation. The Russian translation of the user’s guide will be available in August.

Evgeni Pankriatev, the president of CyrTUG, spoke about incompatibilities between various Russian T_EXs. CyrTUG is bound to solve these problems. They will concentrate on Russian versions of plain T_EX, L^AT_EX, and AMST_EX, adapt the usual style files, next to documentation in Russian.

Interesting too is their project on graphic object representation and an implementation of a graphic library.

With respect to support CyrTUG plans a CTAN mirror and a network of consultants. As said before CyrTUG has matured.

Awards

At the closing session 4 people got awarded:

- Sasha Berdnikov c.s for his work on VFcomb, his multiple master fonts and his extensions to the L^AT_EX picture environment;
- Dag Langmyhr for his refreshing approach implemented in StarT_EX;
- Michel Goossens for his general work and especially for organizing this conference;
- Petr Sojka for his work on T_EX2PDF.

During the conference dinner many a toast was given. Volkert Schaa on behalf of DANTE offered their CD-ROM snapshot of the CTAN to every participant. Gabriel Valiente offered to organize the next TUG meeting in Barcelona.

Sebastian Rahtz kept up with tradition by offering the Cathy Booth award. At the conference the traditional mug was there but T-shirts were missing. As real cooperating polyglots we volunteered to handle this after the conference.

Those who were not present this time have a second chance to experience a T_EX meeting à la Russe by attending a CyrTUG meeting. The next one will probably be in St. Petersburg.

All-in-all a nice and very cosy – ‘ouyoutna’ the Russians would say – conference. Thank you all, especially the perfect host the Dubna Institute of Nuclear Research, with all its volunteers which made this meeting such a smashing success.

²The paper is missing and we are sorry that we can’t give more details.