

Abstracts

How to Create a T_EX Journal: A Personal Journey

Barbara Beeton

When TUG was first formed, the Internet was not generally available; the logical channel for communication with and among TUG's members was on paper. So *TUGboat* came into being.

As T_EX has matured, the needs of the community have evolved, but paper is still a logical medium for showcasing a typesetting tool.

This talk will introduce high- and low-lights in the history of *TUGboat*, some reasons for choosing its particular format and mode of presentation, several experiments, and lots of my personal experiences as editor.

(This was the keynote address at the Practical T_EX 2006 conference, and the full paper will be published in that proceedings. *Ed.*)

T_EX, typography & art together

Gyöngyi Bujdosó

In my previous talk presented at EuroT_EX 2006, the T_EX side of a T_EX and typographical e-learning system was presented.

In this talk the main aspects of the other, typography-related, part of the system will be shown. The design of this part contains topics that can be of assistance to T_EX users in designing their documents by presenting various fonts, page layouts and illustrations. The presentations of the type designers, typographers and artists of the sample creations will also be discussed.

ProT_EXt, a complete T_EX system for beginners

Thomas Feuerstack and Klaus Höppner

One of T_EX's largest strengths is the high modularity and flexibility of the program and related tools. Besides the processor itself, every T_EXnican may use the editors, post processor programs, etc. he prefers most. On the other hand, for beginners or only interested persons this advantage can lead to difficulties, especially in times, where users have gotten accustomed at "complete environments".

To come to the details: While the overall information technology scene is regarded as fast moving, the principle of working with data remains essentially unchanged. People still "feed" programs

with sources and expect transformed data as a result — the difference is in the bandwidth of the programs they use. When I started working with T_EX in the early 1980s, I used IBM's *xedit* for input, which was the same editor I used for all other programs, i. e. SAS or PL/1 sources. Nowadays all those former "programs" have increased to suites, which means they are shipped with their own editor, post-processing routines, etc., while T_EX is still an exception, because of its traditional delivery of core functionality.

At this point you may imagine the difficulties a newbie will run into when planning to use T_EX. Expecting a single and simple installation, like other tools, he will soon find himself confronted with the fact that he has to take care for several tools in addition to T_EX — most of which he has never imagined might be needed. Asking "the experts" which procedures are best to follow, may in the worst case even increase confusion.

According to our experiences, leading beginners to a new system will hopefully end in success, if we take heed of the following simple advice:

- A beginner prefers a system which is big enough to satisfy his needs, and which is likewise small enough so that he doesn't lose a general overview. For example, he normally doesn't want to waste time in choosing the best editor, especially when he can't estimate the result.
- A newbie expects an complete system instead of single components, especially when he can't see the connection between them. If this isn't possible (like with T_EX), collect the *smallest size* of components needed to achieve a first success, and give him a *simple and short* overview/introduction of the relationship which these modules have to each other.
- In addition to the last point, it is nice when you can start with the newest tools, but this is not a requirement. In other words: in only the rarest cases will you start your driving career with a brand new Mercedes Benz, and most likely you won't regard this as a disadvantage.

To come to the end, in our mind the best solution for the problem mentioned above would be a seasonable single-installation comparable to the suites described above.

In the meantime, ProT_EXt was introduced to enable even beginners to easily setup a complete

running system, eliminating one of the main obstacles in using \TeX . We will present the current status of the project, experiences from the previous releases and recent or planned changes.

OpenMath and MathML in practice

Hans Hagen

The Dutch Mathadore project is an experiment that has as main objective to provide content that can be used for math courses in secondary education as well as supplementary courses in permanent education. The content is highly interactive and this made the team decide for OpenMath. This choice is also driven by the fact that the University of Eindhoven is one of the participants.

In this talk I will discuss the role that \TeX plays in this game. I will present the way we deal with OpenMath, intermediate MathML and the final representation on paper. I will also discuss the way authors are dealing with the input, what problems they encounter and how they need to deal with the lack of control in XML based environments.

MetaPost developments — autumn 2006

Taco Hoekwater

The new release of MetaPost includes some new features as well as a number of bug fixes. The new functionality includes: the possibility of using a template for the naming of output files; support for CMYK and greyscale color models; per-object PostScript specials; the option to generate Encapsulated PostScript files adhering to Adobe's Document Structuring Conventions; the ability to embed re-encoded and/or subsetted fonts; and support for the GNU implementation of troff (groff).

(This talk was also presented at Euro \TeX 2006, and therefore the full paper was already published in that proceedings, *TUGboat* 27:1. The paper is also available online at <http://tug.org/metapost/articles>. *Ed.*)

\TeX producing legal documents

Jerzy Ludwichowski

A subsystem for producing legally binding documents for the admission system of the Nicolas Copernicus University, Toruń, Poland, will be presented.

The documents are generated based on data that comes from the system's database. It will be shown how using the simplest means helps to achieve results which look almost impossible to those uninitiated to \TeX .

The presentation will give the motivation for using plain \TeX and \LaTeX as the base for the production of the documents, difficulties encountered and solved, the general design and the (not very advanced) \TeX mechanisms used.

The approach used is a standard one, used before and publicly described an uncountable number of times. Nonetheless, it should be interesting for the conference participants who are not expert \TeX nicians.

\TeX Live — Life with \TeX

Gerben C. Th. Wierda and

Renée M. E. van Roode

When Mac OS X first appeared, people soon started to work on getting \TeX to run on it. Being a Unix system with PDF as the screen language, soon front ends appeared that made use of a (hidden) standard Unix \TeX (with pdf \TeX) in the background and the built-in ability of Mac OS X to handle PDF. te \TeX was an obvious choice as a downloadable distribution. Soon, the process of downloading, compiling and installing was done on behalf of users and the first \TeX installers (based on a precompiled te \TeX) appeared.

Over time, one of these became popular. This redistribution of \TeX first was a redistribution of te \TeX (precompiled with basic configuration options like paper size), then it quickly became a mix of \TeX Live as the basis for the programs (because it was richer than te \TeX) and te \TeX for the basic texmf tree (because it was well maintained and a near perfect starter set).

Now that te \TeX as a separate distribution is no longer maintained it has become time to migrate this Mac OS X redistribution (which for want of a better name we will call gw \TeX) to something that is based on a subset of \TeX Live. The talk will focus on this migration and what was learned about \TeX along the way.

The presentation will end with a short accompanying guest talk entitled "Life with \TeX ".