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# GulTmeeting 2005: a short report

In October, 2005 I attended the 2nd Italian T<sub>E</sub>X Users Group meeting. This is what you missed

Gianluca Pignalberi

**F**ree Software Magazine is obviously about free software. Many readers may also know that we create our magazine using free software. But, not only do we use free software, we also develop it.

I have developed the L<sup>A</sup>T<sub>E</sub>X class that we use to typeset the individual articles and each complete issue. Even though the class isn't very well written (it is getting there!), whenever someone asks me to provide our L<sup>A</sup>T<sub>E</sub>X class, I do send a complete starter's kit for turning L<sup>A</sup>T<sub>E</sub>X into a magazine typesetter; well... sort of.

Yes, I am a big L<sup>A</sup>T<sub>E</sub>X fan.

In Italy we have an official T<sub>E</sub>X Users Group, based in Pisa, that holds a meeting once a year: the G<sub>U</sub>lTmeeting. I was there, and this article tries to summarize what we've achieved.

## The headquarters

The G<sub>U</sub>lT President, Maurizio Himmelman, works with the Scuola Superiore Sant'Anna (Sant'Anna School of Advanced Studies). It's not a high school—it's an autonomous, special-statute university that operates in the fields of the applied sciences and, as the Scuola Normale Superiore, is located by the side of the University of Pisa.

The Sant'Anna School was a wonderful location to base the G<sub>U</sub>lTmeeting. This year's program was rich in the variety of topics it covered, as will become clear in the following sections.

G<sub>U</sub>lT logo (drawing by Robert Duane Bibby) reproduced courtesy of G<sub>U</sub>lT



## The program

The works that were presented were very interesting and showed how T<sub>E</sub>X is still vital in IT despite it being about 30 years old.

Two very famous guests had the most important contributions: Klaus Höppner, Vice President of DANTE e.V. (the German T<sub>E</sub>X users group), and Kaveh Bazargan, co-director of River Valley Technologies. Höppner had a complete report titled “Strategies for including graphics in L<sup>A</sup>T<sub>E</sub>X documents”; Bazargan presented the last “creature” of River Valley Technologies: “Batch Commander: A graphical user interface for T<sub>E</sub>X”.

Klaus's report was interesting for the beginners, explaining the very basic commands and strategies for including graphics in  $\text{\LaTeX}$  documents. However it was also interesting for the " $\text{\LaTeX}$  professionals", since it summarized some technicalities which are not always considered, and presented a tool able to convert raster images into vector ones.

Kaveh did a run-time presentation of his program, surprisingly using a Macintosh to present slides (that weren't written in  $\text{\LaTeX}$ ). Batch Commander is simply a GUI for interactively setting-up  $\text{\TeX}$  ( $\text{\LaTeX}$ ,  $\text{ConTeXt}$ ) global parameters. To tell the truth, Batch Commander is application-independent, since its author successfully applied it to  $\text{POVRay}$  too.

After he explained some of the program's internals, he ran it. He applied some controls to a  $\text{\LaTeX}$  document, via sliders and menus (instead of editing a text file), and it was immediately clear that the controls had been applied to the document. It was impressive seeing the document changing its aspect while Kaveh changed the controls.

He also said that Batch Commander is distributed free of charge, but the question of which license is currently undecided. (Of course, I hope he'll choose a free license.)

The other reports were presented in Italian. Luigi Scarso was the only person to talk about  $\text{ConTeXt}$ . Like  $\text{\LaTeX}$ ,  $\text{ConTeXt}$  is a macro package based on  $\text{\TeX}$ . Since it's younger than  $\text{\LaTeX}$ , it reflects much more recent thinking about the structure of markup. In particular, it can customize its markup to an author's language. Luigi introduced some document examples written in  $\text{ConTeXt}$ , and compiled them.

Gabriele Zucchetta, the man behind the Italian  $\text{\LaTeX}$  free manual (currently being written), showed how to typeset chemical formulae using the package *ppchTEX*. As it was originally written as a  $\text{ConTeXt}$  extension, *ppchTEX* is not an original  $\text{\LaTeX}$  package. All the same, users can use it with both  $\text{ConTeXt}$  and  $\text{\LaTeX}$ , allowing either of the powerful typesetters to handle chemical articles amazingly well.

To aid in the typesetting of theatrical manuscripts, Massimiliano Dominici has written the package *dramatist*, which is much more complete than the ones available now in the Comprehensive  $\text{\TeX}$  Archive Network (CTAN) [1]. He presented a report on his package—explaining how it works, its capabilities in typesetting several manuscript styles, and its still missing features.

Kaveh Bazargan (speaking) and Klaus H\"oppner



The majority of  $\text{\LaTeX}$  users began using  $\text{\LaTeX}$  when they were writing their theses. I was no exception—I started using it under pressure from my professor back in 1999, dropping WordPerfect (at the time I didn't know I'd drop it forever). When I began using  $\text{\LaTeX}$  I had no sample files, I simply dug into my Linux box and found tons of manuals. Together, Lapo Mori and Fabiano Busdraghi wrote a tutorial to help people like me, explaining how to write (well, typeset...) a thesis in  $\text{\LaTeX}$ . The tutorial, among other things, described which classes and packages should be used to get  $\text{\LaTeX}$  to do what you require and the most common mistakes made by newbies. Fabiano himself presented a talk about this tutorial; his talk was very successful, perhaps because so many students were present.

I, not surprisingly, explained my experience in writing the classes that have been used to typeset Free Software Magazine, part of which I have already covered in a previous article entitled "Creating Free Software Magazine" [2].

Maurizio Himmelmann presented the last talk, prepared with Emiliano Vavassori, which covered a package useful for generating reports with  $\text{\LaTeX}$ . He advised that he currently uses *R*, which is a programming environment aimed at data management and analysis. He explained that, while this environment is very powerful in doing what it's designed for, it does lack a native report generator; and that an *R* package called *Sweave* adds this missing feature, exploiting the  $\text{\LaTeX}$  capability.

In fact, *Sweave* does more: it allows users to write hybrid  $\text{R}/\text{\LaTeX}$  documents ( $\text{\LaTeX}$  documents with *R* commands

embedded in them) to be processed and typeset. The processing actually runs  $R$  to obtain needed results, which then get embedded in the source  $\LaTeX$  document. The resulting document is then a pure  $\LaTeX$  document, ready to be typeset in the usual way.

## Additional works

Before dinner we had some time for additional discussion. Some very challenging topics were introduced. Perhaps, the most participated in discussion regarded Gianluca Gorni's strategy to include animation (he showed a run-time evaluated pendulum) into a presentation. A special mention needs to be made of Diego Frasson, who announced an Italian project to write the Beamer manual. As far as I understood, it won't be an Italian version of the existing manual, but a new one. It will be written by users for users. Beamer is a  $\LaTeX$  class written to typeset presentations and slides. Information about it, as usual, can be found at CTAN.

At the end of the day the  $\GjT$  guys worked on a " $\LaTeX$  help desk", where  $\GjT$  experts were available to help users with problems in the use of  $\LaTeX$ .

Professor Enrico Gregorio, a longstanding  $(\LaTeX)$  expert and  $\GjT$ meeting chairman, corrected me as I misassociated a name to a concept in my presentation: I was talking about the FSM table of contents page, and I explained how I forced  $\LaTeX$  to vertically fill such a page (which is treated in a special way by comparison with other ones). A vertically justified page is referred to as *normalbottom*,  $\TeX$ nically speaking. Conversely, a page which is not vertically justified is defined as *raggedbottom* (this term is also the name of the command which allows  $\TeX$  to break a page before it's full, if it judges this choice suitable). Well, I called the FSM page *raggedbottom*, which—as pointed out by the good Professor—was incorrect.

## Conclusion

$\GjT$ meeting is still young—there have only been two held now and they only lasted one day. However, the guests are already coming from around the world: DANTE e.V. is one of the most important  $\TeX$  user groups anywhere in the world; River Valley Technologies is a very important Anglo-Indian firm which provides  $\TeX$ -based solutions, and

From left to right: Emiliano Vavassori, Maurizio Himmelmann, Enrico Gregorio, and myself



its co-director Kaveh is also an editor for The  $\PracTeX$  Journal [3]. I hope (and I predict) that this growth will be steady. See you at the next meeting.

## Bibliography

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### About the author

Gianluca Pignalberi is the  $\TeX$  programmer for Free Software Magazine and a  $\GjT$  member