

## Abstracts

### *Les Cahiers GUTenberg* Contents of Thematic Issue 41 (November 2001)

PIERRE FOURNIER, Éditorial : METAPOST le  
sessin sous  $\TeX$ / $\LaTeX$  [Editorial: METAPOST,  
designing with  $\TeX$ / $\LaTeX$ ]; pp. 3–4

After presenting PSTricks as a set of tools designed to help integrate graphics into  $\LaTeX$  documents, a subject explored in *Cahier* issue no. 16, the editor introduces the current *Cahier* with a similar object, METAPOST.

This issue of the *Cahiers* includes not only a translation (done in collaboration with Jean-Côme Charpentier) of the original METAPOST manual, but also two additional contributions, one philosophical, the other practical. To better appreciate its value, Denis Roegel has a short piece which positions METAPOST in the more general context of graphic design software. The `graph` package, an extension to METAPOST, is also presented. The translations for the texts on both METAPOST and `graph` were authorised by John Hobby, the creator of METAPOST. The last article, by Fabrice Popineau, is a hands-on demonstration of METAPOST in action in a  $\LaTeX$  document, complete with verbatim code samples.

The editor hopes that the flow of the articles, from theory to application, will allow users to begin incorporating METAPOST into their own documents. Further information and help, along with real samples, can be found on various websites. Two such are cited:

[http://www.math.jussieu.fr/~zoonek/LaTeX/  
Metapost/metapost.html](http://www.math.jussieu.fr/~zoonek/LaTeX/Metapost/metapost.html)

<http://melusine.eu.org/syracuse/metapost>

Indeed, the editor suggests that the end of the year provides an excellent excuse to apply METAPOST to one's greeting cards!

DENIS ROEGEL, METAPOST, l'intelligence  
graphique [METAPOST, graphical intelligence];  
pp. 5–16

In this article, we position METAPOST with respect to various types of drawings. We argue in favor of a text-based format and we develop the concept of “graphical intelligence.” We illustrate how this intelligence appears in an example constructing a graph. [Author's abstract (edited)]

JOHN HOBBY, Un manuel de l'utilisateur pour  
METAPOST [A User's manual for METAPOST];  
pp. 17–139

The METAPOST system implements a picture-drawing language very much like Knuth's METAFONT except that it outputs PostScript commands instead of run-length-encoded bitmaps. METAPOST

is a powerful language for producing figures for documents to be printed on PostScript printers. It provides easy access to all the features of PostScript and its facilities for integrating text and graphics.

This document serves as an introductory user's manual.<sup>1</sup> It does not require knowledge of METAFONT or access to *The METAFONTbook*, but both are beneficial. An appendix explains the differences between METAPOST and METAFONT.

[Author's abstract (edited)]

JOHN HOBBY, Tracer les graphes avec METAPOST  
[Drawing graphs with METAPOST]; pp. 140–166

This paper<sup>2</sup> describes a graph-drawing package that has been implemented as an extension to the METAPOST graphics language. METAPOST has a powerful macro facility for implementing such extensions. There are also some new language features that support the graph macros. Existing features for generating and manipulating pictures allow the user to do things that would be difficult to achieve in a standalone graph package.

[Author's abstract]

FABRICE POPINEAU, METAPOST pratique  
[METAPOST, a practical exercise]; pp. 167–175

In this article, I will explain how to use METAPOST in practice. This program is very different from the usual drawing programs, but it fits very well into a  $\TeX$ -based typesetting system.

[Author's abstract (edited)]

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Articles from *Cahiers* issues can be found in PDF format at the following site:

[http://www.gutenberg.eu.org/pub/gut/  
publications](http://www.gutenberg.eu.org/pub/gut/publications)

[Compiled by Christina Thiele]

<sup>1</sup> This manual originally appeared in English, *A User's manual for METAPOST*. The French translation was done by Pierre Fournier and Jean-Côme Charpentier.

<sup>2</sup> This document originally appeared in English, *Drawing Graphs With METAPOST*. The French translation was done by Pierre Fournier and Jean-Côme Charpentier.