Dreamboat

Report on the 2nd meeting of the $\mathcal{N}_{\mathcal{T}}S$ group, February 1994

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The $\mathcal{N}_{\mathcal{T}}S$ ('New Typesetting System') group met during February 1994 at Münster in Germany, where they were once again the guests of DANTE. Those present at the meeting included:

Joachim Lammarsch, Executive Director;
Philip Taylor, Technical Director;
Volker Schaa, Minutes Secretary;
Prof. Dr. Peter Breitenlohner;
Bernd Raichle;
Dr. Rainer Schöpf;
Friedhelm Sowa;
Dr. Jiří Zlatuška.

1 Changes in membership: Joachim Schrod had resigned from the group, and Jiří Zlatuška had been invited to join. Also invited to join, but not present at the meeting, were Prof. Dr. Klaus Lagally and Prof. Richard Palais, the latter electing to be a 'corresponding member'.

2 Activities: the group agreed to continue the three-way effort into (a) the specification of the canonical TeX kit (but now in conjunction with TUG), (b) extended TeX (ε-TeX), and (c) $\mathcal{N}_{\mathcal{T}}S$ via re-implementation in a rapid prototyping language such as CLOS or Prolog.

3 Division of responsibility: Joachim Lammarsch would continue to take overall responsibility for the financial and political aspects of the project, with Friedhelp Sowa as Treasurer; Philip Taylor would continue to take overall technical responsibility, with (a) Rainer Schöpf and Friedhelm Sowa taking primary and secondary responsibility for the specification of the 'canonical TeX kit'; (b) Peter Breitenlohner and Bernd Raichle taking primary and secondary responsibility for ε-TeX, and (c) Jiří Zlatuška and Bernd Raichle taking primary and secondary responsibility for $\mathcal{N}_{\mathcal{T}}S$. Volker Schaa is to take over from Marion Neubauer as minutes secretary.

4 The group agreed that $\mathcal{N}_{\mathcal{T}}S$ should be represented at TUG '94, provided that funding can be obtained.

5 The group made a start on discussing the basic details of the 'canonical TeX kit', but far more work is needed in this area; it was interesting to note that there was perhaps greater disagreement within the group in this area than in any other! Clearly close liaison with TUG and with the TeX user community will be needed if the results are to be universally acceptable.

6 The group agreed that Peter Breitenlohner's work on ε-TeX formed an excellent starting point; the ε-TeX sub-group spent much time discussing implementation details, and agreed the following desiderata:

(a) The WEB source should be capable of generating a 100% compatible TeX, as well as ε-TeX;

(b) The Ini-ε-TeX executable should be capable of generating either a 100% compatible TeX format, or an ε-TeX format, if invoked with no format specified; a command-line specifier, analogous to &, would indicate whether a TeX format or an ε-TeX format was to be generated;

(c) Within Vir-ε-TeX, 'harmless' extensions (those which generate new primitives but do not otherwise modify the semantics of TeX) should be permanently enabled; 'potentially harmful' extensions (those which change the semantics of TeX) should be disabled by default, but individually enableable at the document level; such extensions will need to be enabled/disabled globally in the first release, but this restriction may be eliminated in future releases. Initially disabled primitives should be associated with inaccessible primitives; enabling should be defined as equivalent to \letting an accessible primitive equal the corresponding inaccessible primitive. Disabling should be *defined* for all enableable features, but the effect may be within the set {done, implementation-dependent?, disallowed}. Grouped primitives can be enabled/disabled only as a group; an attempt to enable a primitive which has ceased to be undefined should yield an error. Further investigation is needed into *\ifdefined, the ability to preserve the current state of enabled features, and the ability to return to that state at a later point.

7 The group agreed that further discussions with Professor Keith Bennet regarding the use of his research system for reverse-engineering TeX would be worthwhile, and this was to be pursued.

8 Some informal discussions took place concerning a disclaimer to accompany ε-TeX, the idea being to ensure that any bugs therein be clearly identifiable as being solely the responsibility of the group and

not of DEK; this disclaimer should also ensure that DEK was given full and proper credit for the vast majority of the algorithms and code used, and for his foresight in developing TeX in a highly literate manner.

9 It was informally proposed that the working logo for the ε-TeX project should be \varepsilon (as used by the LaTeX2e project), hyphen, canonical TeX logo, with possible improvements to the overall kerning; the working logo for the $\mathcal{NTS}$ project would be $\cal{NTS}$, with perhaps additional kerning and/or raising/lowering (it was also suggested that the final form should specify a different colour for each letter).

10 Subject to necessary funding being available, the group next hoped to meet at EuroTeX '94 in Gdansk; work would continue in the meantime with communications via electronic mail.

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Fonts

{Meta}Font Forum Redux

Alan Hoenig

Georgia Tobin's *Metafont Forum* was a personal favorite of mine for the several years that she moderated it. Fonts are such neat things. It is now time to revivify this column, and I hope you will join with me in this endeavor.

I hope to bring one article — more or less — to these pages in every issue of *TUGboat*. My work will be much easier if you readers take these words to heart and favor your colleagues with articles on fonts.

What kind of articles, exactly? Well, we welcome almost anything of or pertaining to META-FONT. But it is possible to write about fonts in other contexts, and so we welcome those contributions as well. (Of course, articles on any other aspect of TeX are more than welcome to the pages of *TUGboat* if not this particular space.)

There are lots of things to think about. First of all, is METAFONT, with its bitmapped output, all washed up in a world that's increasingly outline-font-oriented? What kinds of tricks can you play with outline fonts (just for fun, of course)? What happens if we add a touch of randomness when we create a meta-font? And much, much more.

If you'd like to contribute, please drop a line, or mail your article to myself or Barbara Beeton. Email *or* snail mail cheerfully accepted.

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