General Delivery

From the President

Bart Childs

The 10th Meeting was a fantastic success. At least I thought it was. Everybody seemed to have a lots of fun, the sessions were well attended, and the weather was beautiful, as expected.

I was particularly pleased that we had META-FONT and WEB sessions that were well attended. There were also papers about the use of TEX and LATEX in real world environments. This demonstrates that our membership is widely based and not just a bunch of hackers.

We started on a Sunday afternoon with the METAFONT session. We had feared that the early sessions might have no more than 20% or 30% attendance, but more than a hundred participants showed up. In fact, not only was attendance high at all the sessions, but also the audience generally had lots of questions and/or constructive criticism. The authors and audience are both to be congratulated.

Jan Michael Rynning presented a proposal for some changes to TEX to handle problems that Nordic users, with their national keyboards and alphabets with accented letters, found in their everyday work. Our Grand Wizard considered them for a day and announced that he really must make some changes to TEX so that it will handle languages other than English in a natural way. These changes include making TEX 8-bit, adding a \language primitive, allowing hyphenation of words from more than one language in a paragraph, and an extended ligature mechanism that will introduce another primitive or so. The new features will affect TANGLE, TFtoPL, and PLtoTF, in addition to TEX and METAFONT. After some testing, Don plans to release version 3.0. More on this will be released soon.

We have some changing of the guard. The nominating committee convinced Nelson Beebe and Cal Jackson to be candidates for President and Secretary, respectively. I am pleased that these two fine gentlemen who have participated for so long were willing to accept the nominations and were elected. They take office on January 1 and will attend the meeting of the Finance Committee in late October.

I wish to thank Alan Hoenig for his yeoman service as Secretary. I also wish to thank Sam Whidden for his years of service as Treasurer (David Ness was elected to that office last year) and, more recently, as one of the at-large representatives of the Board of Directors to the Finance Committee. The Board selected Alan to replace Sam on the Finance Committee. I think this was appropriate and will ensure that Alan's considerable talents will continue be available to our fine organization. To round out the Finance Committee, I was appointed to a special one-year term as the Past President.

There was considerable discussion by the Board concerning the directions in which the organization should evolve, the appropriate membership and size of the Board, and how the Finance Committee should meet the changing needs of our membership and yet provide stability. The By-Laws Committee (Allen Dyer, Barbara Beeton, and Lynne Price) is still in existence and many of us feel such questions should be addressed in a new set of By-Laws that incorporates many of these thoughts. Sam Whidden proposed and the Board agreed that we should have a long-range planning committee. I will appoint this committee after consultation and agreement with Nelson. Sam's reasoning was eloquently stated. He pointed out the significant changes that TUG has gone through and gave ample evidence that we can expect more in the immediate future. By the time you are reading this, the committee will be at work. You can contact me or the TUG office to obtain a copy of our charge and how to give input.

We were honored to have the elected leaders of the five formally organized European TEX user communities at the conference. Their exact titles vary. All were invited to be present at the meetings of the Board of Directors. I had already appointed Joachim Lammarsch of DANTE (*TUGboat* 10, no. 2, page 287) to the Board of Directors to fill an allocated position. A motion from the Finance Committee was introduced to appoint the other leaders as Vice Presidents for their respective regions. Awarding this title to Joachim as well, we now have the following new regional Vice Presidents:

1. Malcolm Clark, Vice President for the U.K. Malcolm was already on the Board, serving as European Coordinator.
2. Bernard Gaulle, Vice President for France.
3. Roswitha Graham, Vice President for the Nordic Users.
4. Kees van der Laan, Vice President for the Netherlands.
5. Joachim Lammarsch, Vice President for Germany.

The Board discussed whether Board membership should be automatic for any users group and decided that these should be handled on a case by case basis. (I really think that came about because I pointed out that TEXas used to be a country!) Regardless, we welcome these new Board members. I had the opportunity to work with most of them again in September in Karlsruhe and they are good members!

The conference was particularly frustating to the Board of Directors, as they spent more than each lunch hour trying to conduct the business of TUG. It is my hope that next year we can do that on the day before the meeting and maybe the last day at lunch. The Board deserves the chance to meet with the membership and *vice versa*.

We had a wonderful birthday party. (I must admit that I had the best seat in the house.) As a small token of our appreciation we gave Don a print, *Man in Blue*; a compact disk player; and some compact disks. QMS/Imagen is giving Don a laser printer which he said will make volume 4 appear four months earlier. Don and his lovely Jill cut our birthday cake.

We tried to find a CD of the two pieces of music that are referred to in *The TEXbook*. When we could not find Dvořák's *Legends*, we settled on a CD with the *New World Symphony* and *Slavonic Dances*. Don said they were Dvořák's second and third best works. Alan Hoenig said that it would be appropriate to give *Showboat* by Jerome Kern. I received a thank you note from Don in which he admitted that it was a week or two before he made the connection on kern. He thought we had selected it simply for the beautiful music. I noticed that some members gave Don CDs as a token of their appreciation. Good work!

The print was discovered by Cal Jackson. It has a printer sitting in front of a press somewhat like the one on the cover of *TUGboat*. It is a limited edition print of a painting by Ron Adams of Santa Fe.

A large number of the early contributors to the TEX project were in attendance and recognized. A complete list of these will appear in a future *TUGboat* or a special commemorative edition of the program. Sam Whidden showed a home movie of an early AMS visit to the TEX project. Highlights included Barbara Beeton in a bathing suit, Don carving the TEX logo in a table, and a younger view of a lot of early workers.

Ray Goucher took it upon himself to name yours truly the *Lion of TUG* or was it TEX? Oh well; in any case, a lion suit suddenly appeared for me. It was really a nice suit, except:

1. my \hfuzz value was too small;
2. I appeared as an overfull hbox; and
3. I appeared as an overfull vbox.

It had a big button on it that said "Kiss me it is my birthday." I think that I did get a kiss from each and every lady present, so it was a pretty good evening. I have been asked by several if I got to keep the suit. The answer is **no**, it was a rented suit. I kept the button!

Thanks to Ray, Karen, Charlotte, and the entire TUG staff for putting on such a wonderful conference and party!

◇ Bart Childs
  Dept of Computer Science
  Texas A&M University
  College Station, TX 77843-3112
  bart@cssun.tamu.edu

Message from the New President

Nelson H. F. Beebe

I am pleased to accept the post of President of the TEX Users Group for the next two years, and hope to follow the goals and directions of my distinguished predecessors. I am delighted to have Calvin Jackson as our new Secretary, and am equally pleased that our outgoing President, Bart Childs, and Secretary, Alan Hoenig, will continue to offer us their valuable experience.

I have always enjoyed attending the TUG meetings and getting to know many of you. My first encounter with TEX was a talk that Don Knuth presented at Xerox PARC laboratories in the summer of 1978 or 1979; it was entitled *The Errors of TEX*. At our Tenth Anniversary meeting at Stanford in August, he presented an update of that talk, and I understand that in ten years' time, we may have the final story. A short version of his talk will of course appear in the Conference Proceedings (*TUGboat* 10 #4); earlier versions were presented in Stanford Computer Science Department Report STAN-CS-88-1223 (September 1988) and in Software — Practice and Experience, Volume 18, July 1989, pp. 607–686.

Several new issues confront us for the coming year.

First, `score.stanford.edu`, the venerable DEC-20, on which TeX master archives have resided for the past decade, is to be retired. We are looking for a new home for these archives. It is necessary that the replacement host be accessible from all major networks, and I hope that we can establish a mechanism that will permit automatic updating to at least major redistribution sites in other countries, to TeX site coordinators, and to commercial vendors. The persistent problems of Bitnet mail corruption, and Usenet loss or truncation, will need to be dealt with to make this successful. My own experience with my DVI driver family distribution, and regular problem reports to the TeXhax bulletin board of long-since-fixed TeXware and macro file bugs, provides evidence that we need to improve things so that end users can obtain the latest versions without long delays. If we were a commercial undertaking, we would offer software maintenance contracts, but as a non-profit organization, we have to manage with volunteer, part-time, labor. The `netlib` service at Argonne National Laboratory for the automated electronic distribution of software provides at least one model we can follow. Similarly, I hope that we can establish a centralized electronic mail routing system for TUG members, similar to the `na-net` mail drop used by the numerical analysis community.

Second, the thorny legal issue of trademarks has cropped up this year. TeX, METAFONT, AMS-TeX, and LaTeX are all trademarks, but most other programs, and file extensions, in the TeX repertoire are not. DVI is now a registered trademark of Intel Corporation, for Digital Video Interface. We are now investigating what legal steps need to be taken to prevent our loss of use of such names.

Third, we now have at least five formal (inter)national user groups for British, Dutch, French, German, and Nordic TeX users, and we need to decide how these are related to TUG, which is a worldwide organization; our membership comes from at least 44 countries. The national (or language) groups are important and healthy signs of the wide utility of TeX. I had the great pleasure of attending the GUTenberg conference in Paris in May 1989, which attracted about 150 people. National groups offer TeX users the opportunity to talk about TeX in their native languages, and address problems relevant to native language typesetting in a coordinated fashion. I find it noteworthy that the July 1989 issue of TUGboat carried an interesting article on typesetting Vietnamese, and the August conference had a talk on typesetting of Thai. Certain problems posed by non-English language sup-

port led Don Knuth to announce in August that a Version 3.0 of TeX will be produced to address issues of eight-bit character sets, and multi-lingual hyphenation. Many suggestions for other changes were raised by the audience, but he wants to make this a limited modification so he can return to finishing his book series, *The Art of Computer Programming*.

Fourth, we need to expand our financial base, and also to include more users of TeX in TUG. From sales volumes of books and commercial software, we expect there are now several tens of thousands of users of TeX, yet only about 3,500 of us have joined TUG. Our financial advisors are urging us to increase our bank balance to about one year's revenues, following the practice of many other, similar, non-profit scientific organizations. To do this, we need to increase membership, and we need to increase sales of TeX-related products from TUG.

Fifth, the burden of editing TeXhax, and coordinating the UNIX TeX distribution, has become a significant drain on the resources of the University of Washington. TUG is helping with the support of TeXhax, but we are told that the increasing use of (free) network retrieval of software is reducing revenues from tape distributions that are necessary for support of the distribution. Here, I think, we must remember the maxim of the Free Software Foundation, that *free* does not mean without monetary cost, but instead, freely available and redistributable. I feel strongly that there is a place for both public-domain and commercial TeX implementations, but if we are to be able to continue to make the public-domain versions available, mechanisms for adequate support of that effort need to be found.

Sixth, at the August TUG meeting, Leslie Lamport met with a group of interested people to discuss the future of LaTeX. He has insufficient time to begin a redesign of LaTeX to address some of the problems that are now evident. Frank Mittelbach and Rainer Schöpf from Mainz seem to be the ones who have done most in this area, and I suggest that LaTeX is of sufficient importance to us that we need to consider supporting such an effort. The wish list for LaTeX includes a style-writer's guide, removal of the distinction between fragile and robust arguments, better control over placement of floats, and support for multi-page tabular environments, multi-column output, mixed single- and multi-column output, paper sizes other than the standard American A format (8.5in × 11in), and non-English sectional labelling. There are surely others, and it would therefore be helpful to gather them in one place; I hereby volunteer to coordinate such a collection.

Seventh, and last, the literate programming paradigm that is a critical part of the TeX and METAFONT projects is spreading. Two noteworthy efforts have just appeared. E. Wayne Sewell's new book

```
@Book{Sewell:web,
  author =     "E. Wayne Sewell",
  title =      "Weaving a Program:
               Literate Programming
               in {WEB}",
  publisher =  "Van Nostrand Reinhold",
  year =       "1989",
  ISBN =       "0-442-31946-0",
}
```

on WEB is the first textbook on the subject for Pascal, C, and Modula-2 programming. Norman Ramsey's SpiderWEB is described in the Literate Programming section of Communications of the ACM, Volume 32, September 1989, pp. 1051–1055; it is a generalization of the original WEB system, starting from Silvio Levy's CWEB, that abstracts the input parsing and output formatting into grammars that are processed automatically into program code for versions of TANGLE and WEAVE. This has made it possible to support WEB-style literate programming in several languages (C, AWK, Ada, SSL, and others) without having to expend great effort in re-implementing TANGLE and WEAVE from scratch.

Finally, let me urge you to send me your ideas and comments, and complaints and criticisms. Because of my DVI driver activities, my telephone and mail volumes are already substantial; mail contacts are generally preferable to telephone ones, because they give me more freedom in scheduling responses.

◇ Nelson H. F. Beebe
Department of Physics
201 North Physics Building
University of Utah
Salt Lake City, UT 84112
beebe@plot79.utah.edu

Editorial Comments

Barbara Beeton

TUG's great Tenth Anniversary Bash at Stanford has come and gone. The meeting was certainly the best-attended and busiest ever, and I think the program was among the best too. Since the Proceedings are being published this year as an issue of *TUGboat*, I will confine my remarks to happenings that occurred "off the record".

These are the most important developments, as I see them.

- Don Knuth's announcement of TeX 3.0, with significant additions that will make it more flexible for use with languages other than English (that is, with languages containing what we English speakers think of as "accented letters");
- Leslie Lamport's decision to turn over the maintenance and development of LaTeX to a committee;
- appointment of the elected heads of five European national and regional groups to the Board as Vice Presidents representing their respective areas, as a visible step toward "internationalization";
- decommissioning of the Score computer, home to the TeX Project since the beginning, and transfer of the Stanford TeX files to a new location.

The keynote address by Don Knuth on "The Errors of TeX" confirmed something that I'd felt for a long time, namely that a single vision of what a program should be can lead to a more uniform "standard" than any amount of cooperation by a committee. Read about it in *TUGboat* 10#4, coming soon to your mailbox.

The equipment changes at the Stanford Computer Science Department, as well as Don's desire to concentrate on other projects (mainly the *Art of Computer Programming*), will have a significant impact on the way the "first copy" of TeX is distributed. Knuth has by now moved almost entirely off the venerable Sail computer (a DEC-10) and onto a new Sun (Unix) workstation at home. This workstation will not be connected to any network, both for protection against virus attacks and to insulate Don against interruptions (and overflowing disks) by electronic mail. His efficient secretary will continue to accumulate and distribute mail for him, and responses won't be electronic, or instantaneous. Other channels for reporting bugs will be established; details were not available at press time.

The TeX files from the Score computer have been moved to a new Unix machine, labrea (labrea.Stanford.edu), and Don will periodically transport new versions of various files from his workstation to labrea on tape. As of press time, the files for TeX 3.0 had not yet been moved to labrea, but Don produced an article describing the details of the new implementation (see page 325). The errata and changes will be mailed with the Proceedings issue, coming soon. And other developments will be reported in TeXhax and in the next regular issue of *TUGboat*.

In addition to increased international representation on the Board, there have been formal and informal discussions on how *TUGboat* might be made more accessible to readers whose native language is not English. A consensus has been reached that some material of interest primarily to non-English-speaking regional groups will be published in the appropriate language. In addition, abstracts of technical articles will be published in other major languages. You will see the first instances of both kinds of material later in this issue. In order to simplify the task of preparing the non-English abstracts, authors of technical articles are now asked to include an abstract. (Other suggestions to authors are presented in an article by Ron Whitney and me in the Macros column, p. 378; the user interface is new, many of the macros are new, and I have nothing but good things to say about Ron's cheerful assistance with trying to meet *TUGboat* deadlines. Thanks, Ron! The new macros will be shipped off to the various archives as soon as this issue is "put to bed".)

In the last issue, I presented an algorithm for determining *TUGboat* editorial deadlines. I have been reminded that Labor Day is not an international holiday. Oops! Please amend the deadline for issue #4 to be the 2nd Tuesday after the 1st Monday in September.

Another facet of supporting an international user population is to collect hyphenation patterns for "all possible languages". Michael Ferguson has volunteered to build such a collection, and anyone with information on hyphenation patterns is invited to get in touch with Michael at

mike@inrs-telecom.uquebec.ca

Several important posts have now changed hands. TUG's new officers have already been announced. Nelson Beebe and Cal Jackson, President and Secretary, respectively, have been active supporters of TeX since almost the beginning, and I am looking forward to working with them in a more official capacity. The chairmanship of the Output Device Driver Standards Committee has changed hands too; Don Hosek has taken over from Robert McGaffey. Thanks to Robert for getting the committee started; Don — when are you going to send me a report to publish? And by no means least important, the future maintenance and development of LaTeX has been entrusted to the competent hands of Frank Mittelbach, whose name should certainly be familiar by now to *TUGboat* readers (Frank's article on "An environment for multicolumn output", page 407, was the basis for his citation as this year's Donald E. Knuth Scholar); congratulations, good luck, and we'll all be sending you our favorite suggestions.

While I was at Stanford, I paid a visit to Adobe headquarters to find out about the status of the Bigelow & Holmes Lucida math symbol fonts. The font people at Adobe are understandably interested in having these fonts in good working order when they are released, and pleaded, along with more pressing items on their schedule, a lack of experience with TeX and a lack of knowledge of math that prevented them from completing the thorough testing the fonts deserve. With Adobe's concurrence, I have suggested the names of several mathematicians who are experienced TeX users and who have said they would be interesting in beta testing the Lucida symbols. I have also sent in some suggestions for modifications based on font dumps I was given during my visit. I hope to have more news by next issue.

Several weeks later, ignoring the *TUGboat* authors' deadline, I attended EuroTeX89 in Karlsruhe. Although some of the same faces were there that had been at Stanford, there were many that were new to me, and I was delighted to meet more TeXers who had been just names. Anne Brüggemann-Klein and Rainer Rupprecht were splendid hosts, and everything was very well organized. The technical program was varied and interesting (the program is listed on p. 436), and a unique social event was held on Tuesday evening — a visit to a research vineyard followed by an excellent buffet and wine-tasting at the Weingut Theobald Pfaffmann in Landau-Nussdorf. For one who knows about German wines mainly through what is imported to the U.S., I was most pleasantly surprised by the selection of red wines produced in that region and presented to us at the tasting along with the more familiar whites. A sidelight of the daily routine was

BACK\LASH

"The unofficial quasi-daily organ of the TEX89 Conference, '*All the news printed to fit.*'" by Peter Flynn conspiring with Malcolm Clark. Good show!

Next year there will be two meetings sponsored by TUG: the annual meeting at TEXas A & M and a meeting in Europe at the University College, Cork; see the Calendar and Calls for Papers for the important dates. It's time to start planning *now*.

The First Dutch TEX Days

Victor Eijkhout and Nico Poppelier

1   Introduction

The Dutch TEX Users Group, in Dutch 'Nederlandstalige TEX Gebruikersgroep' or *NTG*, was started about one year ago in Groningen. At the meeting in the autumn of 1988 it was decided to have a first presentation to 'the outside world' in the summer of 1989. Three people from the University of Utrecht volunteered to organize these first 'Dutch TEX days' and suggested June 29 and 30, in the Utrecht University computer centre.

After some thought the organizers decided upon a two-part programme: the first day would consist of two courses — one for beginners and one for experienced users — and the second day would consist of various presentations.

2   First day: LATEX courses

The *NTG* members who were invited to teach the courses — Jan Luyten (Computer Centre, University of Groningen) and one of the authors (NP) — suggested that, since in the Netherlands LATEX is used more than plain TEX, the courses on the first day should be LATEX courses. Therefore the organization settled upon a beginners' course which would focus on presenting the possibilities of LATEX by means of examples that the students could try out themselves, and an expert-level course which would focus on LATEX's document styles.

The two groups that gathered on June 29, twenty-seven people in the beginners' course and nineteen in the document style course, were very enthusiastic. The beginners' group, which consisted of secretaries, employees of Elsevier Science Publishers and various other people, even insisted on getting back to their PCs half an hour earlier after lunch.

During lunch and the breaks for coffee and tea there was also enough time for discussions and problem solving. At the end of the day organizers, teachers and students decided that it had been a successful day: plans were made to improve the course material, to add a course for advanced LATEX users and to teach these courses again next year.

3   Second day: presentations

On June 30 some sixty people gathered to attend the opening address by Kees van der Laan, chairman of the *NTG*, an invited talk by Malcolm Clark, *TUG*'s European coordinator, and ten contributed talks which were given in parallel sessions. As 'guests of honour' Joachim Lammarsch and Luzia Dietsche, chairman and secretary of *Dante*, the German TEX users group, were present.

3.1   Opening talk — Kees van der Laan

In the opening talk, Kees van der Laan, chairman of the *NTG*, summarized the short history of the *NTG* and presented the list of working groups of the *NTG*. Most of these working groups have been rather active in the short period since the *NTG* started and a lot has been achieved already:

- material for introductory meetings and courses has been developed
- there is a *Bitnet* discussion list, called `tex-nl` (which is now an *open* list) where questions are usually answered within a few hours by some of *NTG*'s more experienced members
- since mid-summer, there is also a file server where hyphenation patterns and style files can be found, and where more material will be added in the near future.

Kees van der Laan also mentioned that there are now firm contacts with the Dutch *SGML* users group, and that most likely next year's presentation of the *NTG* will be a *joint* one of the Dutch *SGML* users group and the *NTG*.

He concluded by saying that the *NTG*, a young and energetic users group, will try to establish contacts with other user groups in Europe, such as the groups in Germany, France and the Northern-European countries.

3.2   TEX in Europe & TEX in the future — Malcolm Clark

Malcolm Clark, *TUG*'s European coordinator, spoke about the importance of organization in the world of TEX and, especially, the need for European TEX users to organize and to present themselves. He stressed the point that, if European users feel that

TUG should pay more attention to what is happening here, they should become *TUG* members.

He also tried to answer the question 'Why does TeX get bad publicity, or none at all?'. His answer was that the TeX users just *do not* write often enough that TeX is a marvelous and powerful document production system, which features things that other programs are just beginning to show — and guess where they got the ideas from? He added that TeX is a *de facto* standard, a fact that is too often ignored.

3.3 From SGML to TeX and vice versa — Jos Warmer

At the invitation of the *NTG* working group on the TeX-*SGML* relation, Jos Warmer, who has been involved in an Amsterdam project for the implementation of an *SGML* parser, gave an introduction to *SGML*, briefly explaining document type definitions and the mechanism of tags and end tags. As an example he showed the title page of his lecture in both LaTeX and *SGML* form. He then explained that an *SGML* parser primarily tests for whether the *SGML* document conforms syntactically to the document type definition. However, as a further elaboration of the earlier example showed, a simple substitution mechanism seems almost to be able to perform a translation from *SGML* to both TeX and *Troff*.

Jos Warmer concluded by indicating some of the problems involved in the translation from *SGML* to TeX and vice versa, where in his opinion the reverse operation is the more difficult one. He mentioned the problem of TeX's special characters (which necessitate insertion of backslashes), the need to specify a syntax for mathematical formulae in *SGML* for translation to *Eqn* or TeX, and the fact that the choice of back-end (for instance LaTeX) already influences the structure of the document type structure. He suggested that the translation to TeX may very well need to be context-sensitive because of such idiosyncrasies as the gobbling up of spaces after TeX commands.

3.4 DTP versus TeX — Ad Emmen

The speaker, who works in the Amsterdam universities' computer centre and has ample experience with both *desktop-publishing* programs and TeX, talked about the general features of *desktop publishing* programs and the relative simplicity with which you can integrate text with graphics. He then discussed the differences between *dtp* systems and TeX/LaTeX, and their respective advantages and disadvantages. Ad Emmen concluded by giving examples of cases where TeX/LaTeX is to be preferred and cases where he considered *dtp* systems to be a better tool.

3.5 Metafont — Walter Jaffe

Some time ago Walter Jaffe finished a very nice-looking Hebrew font, suitable for reproducing texts from, e.g., the Jewish Bible and Talmud, since it contains the characters for the consonants as well as for the vowels.

He started his presentation with a short introduction to METAFONT, the nature of the language, and the process of designing letters in METAFONT. He then presented his work on Hebrew characters.

3.6 TeX's hyphenation algorithm — Gerard Kuiken

Gerard Kuiken, author of a 5000-item list of hyphenation patterns for the Dutch language — generated by hand! — discussed in detail the line breaking algorithm of TeX and the computation of demerits therein. He then explained the hyphenation algorithm and the compact storage that TeX uses for both these patterns and the hyphenation exceptions.

The last part of his presentation focussed on the particular difficulties of hyphenating the Dutch language. In Dutch, words are on average longer than in English, and situations abound where a hyphenation may be morphologically correct but semantically unfortunate, the classic example being the compound word `bet-o-ver-groot-moe-der` ('great-grandmother') where the first part of the compound `betover` means 'bewitch' and hyphenating after `beto` suggests a similar continuation.

The speaker treated in detail the example `ver-kleden` ('change dress') versus `kerk-leden` ('church members'), which is treated correctly by his patterns, but on which even a recently compiled set of patterns, derived from a list of 350 000 hyphenated words, fails.

3.7 Simple TeX — Andries Lenstra

While the Dutch TeX days had in general a bias towards LaTeX, Andries Lenstra's lecture was solely concerned with `plain` TeX. However, he started out by criticising the way `plain` TeX is often used, namely as a deluxe typewriter, with people interspersing the input with skips and explicit font changes. Like the speaker before him, Auke van der Groot, who talked about a macro package for user manuals, Andries Lenstra stressed the need to separate the logical structure of the document from its visual structure: an author need only be concerned with getting his message across, and must leave typography to people qualified in that respect. If an

author is also the macro writer — as in the case of this speaker — he must try to keep as many degrees of freedom open as is possible, and confine the actual visual commands to a section containing what Andries Lenstra called 'the tuning knobs'.

He illustrated this by means of his macro package 'simple.tex' — of less than 10k size — which he developed when writing the course material for a statistics class he teaches. He treated in some detail the way his macros cope with the problems of optional arguments, when, for instance, only in the case of two consecutive non-empty arguments a separating space needs to be inserted.

3.8 Transparencies with LaTeX — Kees van der Laan

Kees van der Laan, who is involved in teaching various courses and is also a member of the *NTG* working group on course material, presented a small package, in the form of a LaTeX document style, for developing transparencies to be used in teaching courses. In this lecture Kees van der Laan explained how to use the macro package and discussed the philosophy behind the transparency document style, which is of course based on the notion of separating logical structure from visual structure.

3.9 TeX for the Dutch language — Victor Eijkhout

This lecture, an official presentation of any of the working groups of the *NTG*, consisted of an inventory of the collective efforts of three members of working group number 13 and a project not related to any of the *NTG* working groups. This latter item concerned the public availability of a new list of hyphenation patterns for the Dutch language, which was compiled using *PATGEN* on a list of 350 000 hyphenated words. Even this list, however, is not quite up to the problems associated with compound words in Dutch. An extra problem is that its size requires recompilation of both INITeX and TeX.

Victor Eijkhout then presented three LaTeX style options that remedy some acute problems: first of all the option dutch replaces in all four standard LaTeX styles the definitions containing English words such as 'Contents', by parametrized definitions and sets the parameters initially to Dutch values, but English settings are included as well. The style options a4 — not the one by John Pavel — and sober then set the page size to European standards and reduce white spaces and font sizes in the standard LaTeX styles.

In the third part of his lecture, the speaker discussed why the layout of, for instance, the article style of LaTeX is unacceptable for Dutch use, and he presented an artikel style — currently under development — that is compatible to article, but which has a different layout. His conclusion was that the flexibility of LaTeX is in part illusory: in order to achieve certain effects it has turned out to be necessary to rewrite certain macros contained in latex.tex, including them in the new style file.

The speaker conluded his talk by mentioning that all of the above items are freely available on the recently installed Dutch tex-nl fileserver, and gave the appropriate commands for retrieval.

4 Other topics

Apart from the parts of the programme we wrote about in some detail, there were also presentations of AmigaTeX, various applications of LaTeX, and the use of TeX in preparing company manuals.

During the entire day there were also various vendor presentations in the computer centre by, e.g., the local *Atari* dealer and *Hewlett Packard*.

In the computer centre there was a stand with reports and various other publications on TeX, LaTeX and *SGML*, such as a Dutch book on LaTeX, 'Publiceren met LaTeX' ('Publishing with LaTeX'), written by *NTG* members from Groningen, and a report written by *NTG* members and LaTeX users from Utrecht and Amsterdam, discussing LaTeX and the differences between LaTeX and desktop-publishing systems.

⋄ Victor Eijkhout
  Department of Mathematics
  University of Nijmegen
  Toernooiveld 5
  6525 ED Nijmegen,
  The Netherlands
  Bitnet: U641000@HNYKUN11

⋄ Nico Poppelier
  University of Utrecht
  Department of Physics
  Postbus 80.000
  3508 TA Utrecht
  The Netherlands
  Bitnet: Poppelier@HUTRUU51