Balancing Columns of Text and Translation

I would like to typeset translations in parallel with original texts using TEX. Perhaps there is a TEXnician who can solve a formatting problem concerning this type of typesetting.

It should be possible to recalculate the size of blocks taken by each language until both languages end on the same word at the bottom of their block. Suppose that an initial estimate is made such that language A consumes 50% of the page and language B consumes 40% of the page. Ten percent of the page is taken for margins. When language A is at the bottom of its block, language B has only consumed 90% of its block. By making the column of language A approximately 5% wider and the column of language B 5% narrower, the last word of both languages will more nearly come to the end of the block. Is there an easy macro that will do this in TEX?

Johnny Stovall

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Input-Dependent Macro Redefinition

I would like a way of combining various (non-successive) occurrences of certain types of input as the values of a macro. For example, initially we might define \list#1{}. Then an occurrence of \data{...} in the input file should redefine \list so that \list 1 is ..., while \list 2, \list 3, etc. are empty. Another occurrence of \data{***} sometime later should redefine \list so that \list 1 is ..., \list 2 is ***, \list 3 is empty, etc., etc.

Does anyone know how to do this?

Michael Spivak

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Letters

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Dear TUG Members:

It was mentioned at our last meeting that TUGboat has yet to receive any "letter to the editor" submissions. I would like to help rectify that lack by stating my worries about the effectiveness of TUG. The Steering Committee is extremely reluctant to adopt any formal structure or bylaws. We certainly want to avoid unnecessary regulation and such looseness is fine as long as it does not prevent the committee from functioning. We do want to impose certain constraints—I believe the Steering Committee did decide, for example, that, while each of its members is free to define his own rôle, site coordinators should not discourage relevant telephone calls.

The committee members are very aware that opinions differ and are reluctant to take action that might impose their views on the group as a whole. I fear that this admirable attitude, in conjunction with an informal structure, may result in an ineffective Users Group. As a case in point, Sam Whidden mentioned in May that the Steering Committee had decided against assigning the maintenance and distribution of TEX to a software house. There was considerable discussion of this point in January. Bob Morris eloquently argued about the dangers to university users of such an approach. I was not aware, however, that Bob had succeeded in convincing the committee as a whole. I had supposed that the finance committee would have prepared alternate proposals before this last meeting, that there would have been more discussion, and that a final decision would have been based on a vote. Certainly we cannot continue to abandon proposals simply because they engender heated discussion.

The same attitude emerged in the schedule for the "Implementors' Workshop". The program for the entire second day of the two-day meeting was left unplanned in order to allow attendees to raise issues of their own interest. With the limited amount of time available, the breadth of the information to be covered, and the number of opinions to be solicited, it might have been better for someone to have taken the responsibility of making the decisions ahead of time. The intent of the meeting was to provide demonstrations of output devices and discussions of TEX implementations on various architectures. These topics were postponed until the end of an intense conference. While the other material was of unquestionable value, it was of most interest to users who currently have access to TEX and to individuals considering acquiring TEX rather than to those who have decided to install TEX but have not yet succeeded in doing so. It is ironic that Richard Palais pointed out that it has been over a year since a general meeting of all TUG members—surely, had it been so advertised, this meeting could have been one. It is also ironic that Phil Sherrod suggested small workshops hosted by assorted TEX sites to describe their own installations. Such a suggestion indicates that this meeting did not fulfill its intended purpose.

The May 14th Steering Committee meeting was open to the membership as a whole. The Steering

Committee certainly wants its actions to be visible, it wants to solicit the opinions of others, and to encourage new volunteers. However, by the time all participants in such a large group have voiced their opinions, it is impossible for decisions to be reached. We need an effective decision-making process.

The Steering Committee has also proposed raising individual membership fees and establishing institutional memberships. This action has been delayed until TUG determines the services it will offer in exchange for such funds. A current situation illustrates both the need for some formal organisation and the need to raise money. The ANSI X3J6 committee on text processing language standards is meeting June 22–26. Experienced users of two other mathematical typesetting systems have been invited to present the software with which they are familiar. This ANSI committee has asked that a TeX user also participate. Although it is likely I will join X3J6, I am unable to attend the upcoming meeting. Mike Spivak has volunteered to substitute for me, but does not have institutional support for his travel expenses. The officers of the TUG Steering Committee strongly feel the Users Group should support this activity. However, our treasury is empty and it is not clear who can authorise such expenses.

The cure for this chaos is more work by the Steering Committee. Sub-committees should meet (even electronically or by telephone) between general meetings. Someone must accept the responsibility of organiser and must be willing to make decisions, even if they are temporary decisions later vetoed by vote of the entire membership. I am as guilty as anyone else of neglecting my Steering Committee responsibilities except during meetings and the few days before TUGboat submission deadlines. I, for one, will attempt to be more active in the coming months.

Sincerely yours,
Lynne A. Price

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Dreamboat

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Send Submissions to:
Lynne A. Price
Calma R&D
212 Gibraltar Dr.
Sunnyvale, CA 94086

One refreshing quality of the TeX user community, and particularly of the system's creator, is that TeX is viewed, in fact intended, to be the ancestor of an evolving family of document formatters rather than as a static piece of software that will be used for decades. DREAMBOAT is a feature of TUGboat where users can describe (in whatever detail) capabilities they would like to see implemented in some successor system.

A brief "Son of TeX" session was held at Stanford in May. Extensions of immediate interest include applications to non-mathematical documents, even those printed in languages other than English. The foreign language application requires replacement of the English-based hyphenation module. For Hebrew and Arabic, right-to-left formatting would be convenient. There is also current interest in interfacing a general graphics capability with TeX. As described in the last TUGboat, Vanderbilt University has modified the Versatec spooler to allow output of plot files created in a format compatible with their Zeta pen plotter. They intend to modify TeX so that plot files can be merged with TeX output. Other installations are working on graphics extensions.

TeX's user interface, particularly the input language and error messages, was also discussed, as an area to be improved in the less immediate future. One specific point mentioned was the difficulty of identifying which spaces and carriage returns are significant. Macro languages in general were criticized. The controversial suggestion was made that future systems be more like programming languages. Joe Weening, a Stanford student, described his work on a TeX derivative called LaTeX, which is a hybrid of TeX and Lisp. In LaTeX, one can escape from TeX into Lisp, to do complex computations or text manipulations which are difficult or impossible to do in TeX.

Other topics included page markup and an interactive ("what you see is what you get") version of TeX. There was some discussion of a feature that enabled users to tell where on a page material was being placed. David Fuchs pointed out that such a feature is incompatible with TeX's algorithm for determining page breaks.

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