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Letters

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REPORT FROM AN EARLY AMS-TEX USER
David Eck

I was very happy recently to bring to a successful conclusion my first major project in using TEX—actually, my first experience of any kind with TEX. The project was the preparation of my thesis for publication in the *Memoirs of the American Mathematical Society*, which involved the production of about fifty typeset pages, with a rather high density of complex mathematical symbols.

Having typed one or two mathematical papers myself and read my share of typewritten mathematics, I was impressed with both the ease with which input for TEX can be prepared and with the quality of the output. Of course, this praise is not without qualification, but I believe that a large fraction of the frustrations I encountered can be traced to the "frontier" nature of the conditions under which I was working.

I began with a quick reading of Knuth's manual. I then spent a good bit of time, interrupted by frequent references to the manual, transcribing the first few pages of my thesis into a TEX input file. I was surprised after a little more than ten pages to find that I was typing at almost my (admittedly slow) normal typing speed, even without pre-processing the manuscript in any way. About a third of the way through, I received a rudimentary version of the forthcoming AMS-TEX manual, which made things a bit easier. Since the book had no index at the time, it was rather difficult to use, but it is clear that AMS-TEX will insulate the user from many of the traps and technicalities of TEX. The average time for typing a page, after I overcame my initial inexperience, turned out to be about one-half hour, and the task seemed less unpleasant then ordinary mathematical typing.

I did not try to run anything in TEX until the entire thesis was prepared. This proved to be a major mistake. I had to spend perhaps an additional forty-five minutes per page at a computer terminal correcting and editing my files. More than half of this could certainly have been avoided if I could have seen my output every few pages, and learned from my mistakes. Unfortunately, this was not possible, since I was at Dartmouth College, and the nearest TEX program was at MIT. Hopefully, this sort of thing will not remain a problem for long!

My overall impressions of TEX were very favorable. I wish it were available even for day-to-day things such as preparing tests. I am especially fond of the ease with which errors can be corrected and passages added or deleted in a computer file. Let us all look forward to the time when TEX becomes a *lingua franca* of mathematical publication. My experience has convinced me that this would make life easier for the authors and typists, as well as for the publishers.

Editor's note: David Eck's manuscript has been run successfully through TEX and a prototype AMS-TEX both at MIT and at the AMS, and output onto various devices at those locations (and elsewhere). Appendix A contains several one-page samples (along with the TEX input) to allow a comparison of the appearance and quality available from both low and high resolution devices.

Eck's paper was written before the specifications were set up for the Memoirs. A header (macro) package is being written, however, and should be available soon for distribution with AMS-TEX. The sample input should thus not be taken as the archetype of Memoirs input.

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Dear Editor,

I was pleased to receive the first issue of TUGboat, and am looking forward to the day (any year now, they tell me) when TEX will be available on our system at Brown.

However, I was disturbed by one thing in TUGboat: the large number of puns predicated on the assumption that TEX rhymes with sex. The title of Michael Spivak's book will further popularize this myth. I would have thought that the high wizards associated with TUGboat would have had occasion to actually read Don Knuth's manual; if they had looked at page 4, they would know that TEX, Tau Epsilon Chi, rhymes with bleeehhh. As Knuth says, you can pronounce it however you want and the computer won't mind. To us humans, however, there is a useful difference: If one is looking for advice on TEX, one should shun anyone claiming to be a TEXpert; they probably know a lot less than they think they do. On the other hand, a TEXnician is a most useful friend to have.

Sincerely,
Graeme Hirst
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