From the president

Boris Veytsman

As a member of The Book Club of California (`https://www.bccbooks.org`), I was invited to organize an exhibition for the club members. I decided to devote it to the history of TEX.

It feels strange to talk about a history of a computer program: the art of programming still seems new and shiny. Karel Čapek, a great Czech writer, noted in 1925,

> Car drivers are always young. Some day in the future we could read in a story, "The devoted old driver grabbed the steering wheel with trembling hands", or "Old Petr, still strong despite his age, put on his best scarf to drive the bride and groom to the church". Some day they will write about "spacious heirloom cars" as they used to write about ancient carriages, and about wise old car drivers as they now sometimes write about wise old cabbies.

We are now living in the age when there are not only old (spacious!) cars, but also old computer programs (and, sadly, old programmers). It is even more strange that we are working with one of these heirloom programs, which is still working for us, daily churning out thousands of beautiful books and articles. However, after four decades, TEX is still strong (despite its age, as Karel Čapek would slyly note).

In the preparation of the exhibition I have been helped by the recent two-part series by Barbara Beeton, Karl Berry, and David Walden in the *IEEE Annals of the History of Computing* (the preprints are available at `http://walden-family.com/ieee/texhistory.html`).

I am also being helped by the generous TUG members who donated many items and helped me with valuable suggestions. I am especially grateful to Martin Ruckert for the source code for his program, William Adams who sent me (physically!) a large box of books, and to Dave Walden, who shared with me many rarities, including the beautiful monograph by David R. Siegel on Euler project at Stanford.

Most of all, I was absolutely stunned by the generosity of DEK, who gave me the TEX incunabula: the first ever book typeset in TEX in 1978. The book is described in Don's paper (TEX Incunabula, *TUGboat* 5:1, 1984, pp. 4–11, `https://tug.org/TUGboat/tb05-1/tb09knut.pdf`):

> I like to think that the first *real* book to be printed with TEX was a 28-page keepsake that was made for my wife's relatives at Christmastime, 1978. This book included eighteen original linoleum block illustrations, into which we pasted XGP-produced text set in a special 14-point extended variant of the prototype Computer Modern font. In order to compensate for the XGP's limited resolution, we prepared magnified copy and the printer reduced it to 70%; the effective resolution was therefore about 286 pixels/inch. [...] About 100 copies were printed, of which roughly 25 were sold and the remaining 75 were given as gifts. A complete library citation for this book would read as follows: "*Lena Bernice: Her Christmas in Wood County, 1895.* By Elizabeth Ann James, with illustrations by Jill Carter Knuth. Columbus, Ohio: Rainshine Press, 1978."

It is astonishing to think of the number of TUG members born after *Lena Bernice* was printed.

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Typography is a conservative art. As has been noted a number of times, we call typefaces that appeared in the eighteenth century "Modern". TEX, which was first used for a "real" book in 1978, is still considered sometimes an upstart by bibliophiles — a mirror image of TEX as an old geezer among some computer people. My opinion is that it is neither: TEX is a great tool created within the long tradition of typography. The latter was always influenced by technology changes, even since movable type (a technological innovation!) was born. What makes TEX different — and very useful — is the idea that the beauty of a printed page can be understood as a function of the layout, and the function can be calculated and optimized by a computer algorithm. Since this idea transcends the details of technology available in the 1970s, TEX has turned out to be quite resilient. It has survived the introduction of PostScript, the advent of PDF, several changes of font technology and many other innovations. I am sure it will survive the current challenges and technological changes.

The thought I would like to convey in the Book Club of California exhibition is that TEX is a natural tool for a typographer, which, unlike many other technological tools, is aimed at increasing beauty rather than sacrificing it to other goals like economy or speed. *The TEXbook* starts with the description of TEX as *a new typesetting system intended for the creation of beautiful books [...]*, and its main part ends with the famous exhortation "GO FORTH now and create *masterpieces of the publishing art!*". I hope to be able to communicate this thought during the exhibition.

⋄ Boris Veytsman
https://tug.org/TUGboat/Pres