The TEX History Panel

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Anita Schwartz chaired the TEX History Panel. She introduced herself as a member of TUG for 15 years and has been involved in supporting TEX and LATEX at the University of Delaware for past 15 years. She has developed a number of macros specifically for professors writing books and styles/classes for theses and dissertations. As part of the history of TEX, she provided old issues of *TUGboat* (1980), some special issues, *TEXniques*[4], which led to the current conference Proceedings issues of *TUGboat*, EuroTEX '92 (the only hard bound issue) and t-shirts to view from over the years. Also three framed posters by Professor Alban Grimm (see Poster Exhibition article in *TUGboat*, Volume 20 (1999)) were on display.

Barbara Beeton introduced herself as one of the first users of TEX. She is a true TEX Historian. She provided two original TEX books that she used to learn the TEX system and spoke about her early experiences with TEX. She talked about her communications with Don Knuth over the years. Also Barbara modeled one of the original light blue t-shirts with black lettering `{\TeX\ User Group}`.

Nelson Beebe spoke about his original interest and involvement with TEX and how he got to know about it. His involvement with TEX began in the spring of 1979, when during a trip to the Bay Area, he was invited to Xerox PARC Laboratory to hear a talk given by Don Knuth on the new typesetting system, called TEX, that Don was working on. This was of immediate interest to him, because he had long been interested in software portability, and had long wanted to have portable documentation for software. In the mid-1970s, Nelson developed a prototype document formatting system, called DOCUMENT, with many similarities to UNIX nroff, although he had not heard of nroff at the time, since it too was under development. A check of Gehani's book[2] shows a report dated 1977 by Joseph Ossana "*nroff/troff User's Manual*", and a 1975 paper on eqn[3], so evidently nroff/troff goes back to at least about 1975. These were more ambitious than DOCUMENT, having the advantage of a real typesetter, and the implementation language C, which did not become widely available outside Bell Labs until the early 1980s. [For portability reasons at the time, Nelson was restricted to Portable Fortran, and later, translated the code to a very nice structured Fortran preprocessor language, SFTRAN3, developed at the Jet Propulsion Laboratory, Pasadena, CA.] When Nelson saw what Don had done, he was very excited, because here was a vastly better system than anything he'd seen before, and furthermore, it ran on the same hardware that he used at Utah (a DEC-20 running TOPS-20). Importantly, it could do mathematics! It wasn't long before Nelson fetched over Don's early TEX '78 distribution from Stanford and made early experiments with dot matrix printers (the Florida Data and the Printronix) to see whether cheap draft output might be possible, because he could not find US$20K to buy an early model laser printer from Imagen (a Stanford spin-off). He based his work on what Mark Senn had done (at Purdue) for the BBN BitGraph terminal, because he happened to have one. This work was later chronicled in a *TUGboat* paper [1]. It wasn't until 1984 that Nelson finally was able to get a real laser printer that could produce decent output. Nelson has been able to attend all but two of the annual TUG meetings, including the first one, and today, TEX is very much a part of his everyday life.

Hans Hagen mentioned he felt more like a newcomer, but was willing to note predictions about the future history of TEX. He noted that before the World-wide Web was widely used, it was not trivial to get TEX up to speed and up to date when you were not part of the "university scene." He had to buy TEX programs, buy patterns, tweak English tuned files that he didn't understand, etc. It was one of the things that drove him to develop his own macros: he was

simply unaware of the things happening and the TEX community, because everyone expected everyone to be online. He noted later, post-conference, that he even bought back issues of *TUGboat*, but most went unread since he lacked any reference point and understanding of TEX cum suis; it's only recently that he has an idea how things were back in the TEX 80's.

Martin Schroeder discussed the real history of TEX and requested that if you had knowledge of important TEX dates to submit them to be placed in the TEX calendar. He also mentioned important recent and upcoming birthdays of Don Knuth and Leslie Lamport.

References

[1] Nelson H. F. Beebe. Low-cost downloadable font devices. *TUGboat*, 4(1):11–12, April 1983.

[2] Narain Gehani. *Document Formatting and Typesetting on the UNIX System.* Silicon Press, 25 Beverly Road, Summit, NJ 07901, USA, 1986. ISBN: 0-9615336-0-9.

[3] Brian W. Kernighan and Lorinda L. Cherry. System for typesetting mathematics. *Communications of the ACM*, 18(3):151–157, March 1975.

[4] TEXniques, Publications for the TEX community. TEX User Group, http://www.math.utah.edu/pub/tex/bib/index-table-t.html#texnique, 1988–1990.