
LETTERS

COMPUTER HISTORY ASSOCIATION OF DELAWARE BEGINS!

> Well, I've started the process. I registered the name "Computer History Association of Delaware" this afternoon - it's funny, you've got to check a set of ledgers to ensure that the name hasn't already been registered. I would have been _very_ surprised if I'd found a match in the 1901-1925 ledger :-)....

Would you be willing to forward me a copy of your Statement of Incorporation and organizational bylaws as a starting point for discussions? In Delaware, you only need a single person for incorporation and no assets.... It's occurred to me that if you get a flood of interest in starting other state organizations, it might be worthwhile for me to put together a set of boilerplate applications materials for incorporation in Delaware....

Let me know what you found useful (and not) in setting up the organization in California.

Now, where did I put those RK03 drives...

Thanks!

-- Tony Eros, Digital Equipment Corporation

[Thanks to you, Tony! As I write this we've already sent you some material by net.mail, but as we look back over the process of assembling this organization, there's been a whole lot to it -- even so far. As we build the CHAC, we'll put together -- and try to update -- a suggestion file which will be available from our request daemon.

PLATO AND SMALLTALK

> While we're on the subject of Smalltalk, here's a bit of history the world is forgetting:

In the mid 1970's, there were only two organizations in the world with a large body of experience working with bit-oriented graphics. The group we remember best today is the group at Xerox, working with the Alto computer, the Smalltalk language, and various exploratory windowing environments. The other group was centered on the University of Illinois PLATO IV computer system. This system supported close to a thousand interactive

terminals, each with a plasma display panel where the rest of the world expected a CRT, and it supported the TUTOR programming language, a dismayingly mixed blessing, with very high level input output facilities geared to the bit-addressable plasma panel, and control and data structures straight out of the stone ages.

The two groups developed their ideas about how to handle bit addressable display hardware quite independently, but in the mid 1970's they got together and traded visiting staff members, hoping to learn what they could about each other's best ideas. Both sides clearly had some excellent ideas, too. Xerox had windows, mice, the object oriented paradigm, and the fundamental idea of bit-mapped CRT displays, while PLATO had notesfiles, input judging, touch-panel input, and the flat panel bit addressable display.

The exchange was lopsided, though. The PLATO people who went to Palo Alto found Smalltalk to be impossible to learn. The reason was that, as TUTOR programmers, with background in other languages like FORTRAN and BASIC, they found object orientation almost impossible to grasp. On the other hand, the Xerox people visiting Urbana picked up TUTOR very quickly, complained about its backward control structures and data structures, and very quickly came to appreciate the brilliance of its dialog management tools.

The other side of the coin is also interesting. The people at Xerox were being funded largely out of a hope that they would provide a new technology for the "automated office of the future". In doing this, they put in too much time trying to provide computer analogs of the paper tools of a conventional office. While the Xerox community talked about electronic memo distribution in very learned tones, they tended to miss the fact that digital communication could take off in an entirely different way that bore little resemblance to the way we communicate with paper and typewriters.

The PLATO project was intended as an experiment in computer aided instruction, and they were so set in this orientation that they used the word "lesson" for what all of the rest of us would call a program. PLATO had a large on-line user community, and interactive multi-user games were the single most intensive application through the 1970's, despite a string of official policies discouraging such use. In this context, there was no effort to mimic the paper and pencil world; instead, as user demand grew, and as tools succeeded, they were improved on.

The result was a world of inter user communication based on E-mail and notesfiles, where a notesfile is exactly analogous to a newsgroup on USENET today. From their start in 1973, Notesfiles were moderated, but the need for unmoderated notesfiles emerged

very quickly. Because of the educational setting, the PLATO project ended up taking a very mature stand about the need for anonymous postings (a stand that is far more mature than the stands currently being taken by the majority of Internet sites today).

Another example of this was the PLATO on-line user's manual, AIDS. The AIDS system was entirely non-linear from its start in 1973. Today, we would call it a hypertext document, but that term had yet to spread from California to the interior. The PLATO manual was never intended to be linearized into a paper document (although that was eventually done), and the interconnected structure of AIDS was a marvelously effective way to present information.

I was at Illinois from 1973 to 1980, working with PLATO but not for it. My MS project, in 1976, was a re-implementation of the TUTOR language on a minicomputer; this was the first implementation of TUTOR on any machine other than a CDC 6600. This write-up centers on what I learned at lectures by the visitors from XEROX PARC, as well as being based on my own visits to XEROX research facilities and on my memory of what other PLATO people said about their experiences during the PARC PLATO exchange.

-- from Doug Jones, via Internet

INVENTORY OF HAL LAYER'S COLLECTION

> Outstanding!! Wonderful Vol. 1, No. 2!! Enjoyed it immensely. I agree with other correspondents in feeling alone in the pursuit and rescue of artifacts before they were thrown out by companies too involved with survival and the future to be concerned with the industry's history.

I have been collecting in the categories of calculators, video games, and computers. for several years. If of value to your readers, here is my list of acquisitions, so far, in the computer category, with my best estimate of dates.

computers.....

1956 Heath Electronic Analog Computer kit (front panel only), (Heath)
1964 EAI analog computer, Model TR-20 (EAI)
1971 Compumedic analog computer, (Compumedic)
1972 GRI Minicomputer, Model 99/IIB (GRI) *
1973 Intel Intellec-8 micro, CPU: 8008, (Intel)
1974 Intel Intellec-4-40 micro, CPU: 4040, (Intel))
1974 Scelbi-8H Mini-Computer, CPU: 8008, (Scelbi)
1974 IMP-16P. micro (front panel only), CPU: IMP-16, (Natl