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**Editorial comments**

Barbara Beeton

**T<sub>E</sub>X at 2<sup>5</sup>**

I don't know about anybody else, but I'm looking forward eagerly to this year's TUG meeting in San Francisco. While it won't be on the Stanford campus, where it all started, and where quite a few of the early meetings took place, it's close enough, and an important enough anniversary, that Don Knuth has been persuaded to share some of his precious time with us. A substantial number of Don's students who worked on the T<sub>E</sub>X project will also be there, if only in anticipation of a good party, since all of them have gone off in other directions. Since 2<sup>6</sup> is 32 years away, it's unlikely we'll all be around to celebrate that anniversary together, though it might be interesting to place wagers on whether T<sub>E</sub>X itself will still be around.

Speaking of Don, he has received yet another prize — one of the Katayanagi Prizes in Computer Science, awarded annually by Carnegie Mellon University in cooperation with the Tokyo University of Technology. The announcement can be found here: <http://cacm.acm.org/magazines/2010/3/76269-katayanagi-prizes-and-other-cs-awards> (thanks to Nelson Beebe for spotting this).

**Pi Day**

March 14 marked Pi Day; more precisely, it should have been marked at 1:59 (local time, of course). Stephen Hicks (whose acquaintance I've not had the pleasure of making) sent the following offering to `texhax`, to introduce himself and celebrate the day. Try it for yourself. It requires plain T<sub>E</sub>X.

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\let~\catcode
~'z0~''1~',2~'q13~'z#
14~'46zdefq41'~'4113zgdef,q
QQ41'~'4113zlet,qBB415425'41-P#
7427,QQPzexpandafterqAA414243'H#H
42434341542415,qCC41742743'41i-D42#
434343,qww',zedefw'PPPCPBAYap!,qEE',q
6641'~'4113zcountdef,QNNzifnum6RR1R20E6
YY2QAAzadvanceY-RAY1QMMzmultiply6XX3EqS
S'Ezhskip0.5em,EQJzjobnameEQmmwE6TT5qj
j4142x'41zgdefm'42,,EQGGzglobalE6CC7Eqr
r41'T41MT41ACT,qHH'C0rXrYC-CrR,q00'zifx
mEPjwxEzelsePjmxzfi,qcc'NX<RHNC<OSzelse
0EzfiAX1PczelseEGAY2zfi,EzedefzJ'J,qv
v'@,zifxzJvQ00*zfiEq11'NY<RX-Rzhbox
'c,Plzfi,zttlzbye3.14159265358979
3238462643383279502884197169399
375105820974944592307816406
286208998628034825342
1170679821...

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Barbara Beeton

**The @ sign as a design icon**

In the March 21 issue of the *New York Times* is an announcement that the Museum of Modern Art (MoMA) in New York has admitted the @ sign into its permanent architecture and design collection. ([www.nytimes.com/2010/03/22/arts/design/22iht-design22.html](http://www.nytimes.com/2010/03/22/arts/design/22iht-design22.html))

The rationale is that the use of this sign in e-mail addresses excels “in terms of form and function[.] Does it embody the values of clarity, honesty and simplicity that MoMA considers essential to good design? Has it made an impact on our lives? Is it innovative?” The senior curator of architecture and design at MoMA, Paola Antonelli, asks “If this object had never been designed or manufactured, would the world miss out?” Absolutely!

The use of the @ to indicate a destination in an e-mail address was instigated by Ray Tomlinson, then at Bolt, Beranek & Newman.

I was able to ask Ray some questions about his choice.

*bb*: Were there any other candidates?

**RT**: Not really. I wanted to avoid characters that appeared in the login names on various operating systems. This eliminated letters, numerals, comma, period, square brackets and parentheses. Others such as curly braces, tilde, back quote were in the lower case set of characters and didn't appear on all terminals. Of the remainder, the at-sign leaped out as the obvious choice. It satisfied the criteria and just made sense. Later, I discovered that the at-sign was the line erase character on the 2741 terminal used by Multics. Dave probably remembers the grief that Multics users suffered every time they typed the at-sign. In order to type in an at-sign, you had to type it twice in a row. After the first one, the terminal controller locked the keyboard so you had to wait a second or two before the keyboard would unlock so you could type the second at-sign.

*bb*: I don't remember when computer keyboards finally recognized the difference between upper- and lowercase letters, but they did have punctuation and a few symbols (though not necessarily the same set as available on standard typewriters).

**RT**: There were computer terminals around that had both upper and lower case characters. The aforementioned 2741 was one such terminal and more expensive models of Teletype terminals also had lower case characters. But there were many that were restricted to upper case.

*bb*: How much of the “full” current format of Internet addresses was part of the original design? Was it sufficient to have just <user name> @ <host>, or

was there a need to provide for something more elaborate?

**RT:** Email addresses have always been

`<user>@<host>`,

what has changed is `<user>` and `<host>`. At first, user names varied. For example, some were numeric. As time went by user names shifted towards being word-like if not actually words. Host names had little structure and certainly did not have `.com`, `.org`, or `.edu` at the end. The namespace was flat and typically started with the name or abbreviation of a company or university followed by something to distinguish one computer from another at that site. So, BBN-TENEXA was our main computer system. BBN-TENEXB was the development and test machine. Later the Domain Name System (DNS) came along to make computer name assignment more manageable.

*bb:* I'm delighted to have this opportunity, and want to extend a big "thank you" for helping to create this beast that we sometimes love, and sometimes hate, but on which we have certainly grown totally dependent.

**RT:** You are welcome.

### Amusements on the Web

Do you need something typographical to decorate your wall? The Periodic Table of Typefaces might be just the thing. Check out [www.squidspot.com/Periodic\\_Table\\_of\\_Typefaces/Periodic\\_Table\\_of\\_Typefaces\\_large.jpg](http://www.squidspot.com/Periodic_Table_of_Typefaces/Periodic_Table_of_Typefaces_large.jpg).

Other "periodic tables" can be found with a bit of help from Google. This one, illustrating visualization methods, might come in handy when preparing a beamer presentation: [www.visual-literacy.org/periodic\\_table/periodic\\_table.html](http://www.visual-literacy.org/periodic_table/periodic_table.html).

Another site about visual communication is [www.citrinitas.com/history\\_of\\_viscom/](http://www.citrinitas.com/history_of_viscom/). Sadly, I found the text rather difficult to read, as it's white sans serif on a black background, but the illustrations are splendid.

For a really spectacular introduction to a book, the New Zealand Book Council has destroyed the book they're inviting you to read, to make a stop-motion animation, but with results that are hauntingly beautiful. This book is on my reading list, and I've bookmarked the video: [www.creativepro.com/article/stop-motion-animation-book-lovers](http://www.creativepro.com/article/stop-motion-animation-book-lovers).

### Videos of typography talks on the Web

For several years, Kaveh Bazargan has been recording talks at various conferences on  $\TeX$ , typography, publishing, and other topics. The River Valley TV site ([river-valley.tv](http://river-valley.tv)) is home to this collection of videos. The full schedules of TUG 2007–2009 are included. This is an invaluable resource, and we are most grateful to Kaveh for his generous contribution of time and resources.

One non- $\TeX$  video well worth searching out is a talk by John Hudson of Tiro Typeworks on scholarly types, presented at the Type[&]Design 2009 conference organized by DTL in the Hague. One of the topics covered by the talk is the Cambria Math font, developed by Tiro Typeworks for Microsoft. (This font is at least partially supported by  $\XeTeX$ .) The video is at [river-valley.tv/scholarly-types/](http://river-valley.tv/scholarly-types/) and the accompanying slides are at [www.fonttools.org/downloads/TD\\_2009/Scholarly\\_Types.pdf](http://www.fonttools.org/downloads/TD_2009/Scholarly_Types.pdf).

Other talks from Type[&]Design 2009 may also be of interest. On the main page at River Valley for this conference is a link to the conference site. At the top of the conference home page is a "Stop Press!" announcement — the Dr. Peter Karow Award for Thomas Milo. The citation for the award recognizes "the development of the ACE layout engine (the heart of the Tasmeeem plugin for InDesign ME) for Arabic text setting." Attendees at Euro $\TeX$  2003 may remember Thomas Milo's talk "ALI-BABA and the 4.0 Unicode characters — Towards the ideal Arabic working environment" (*TUGboat* 24:3, pp. 502–511).

### Alphabet soup

Another web site . . . This one describes a project that "attempts to determine a number of things about the shapes of letters in several different writing systems." The building blocks discovered by examining various alphabets are operated on by a set of rules, "a grammar or syntax", to combine into recognizable letters that are nevertheless not of the "standard" form.

The program is written in Python, is downloadable from the site, and experimentation is encouraged. Find it at [www.theory.org/artprojects/alphabetsoup/main.html](http://www.theory.org/artprojects/alphabetsoup/main.html).

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