Jan. 26th

First TV Demo

Jan. 26, 1926

The Scottish inventor John Logie Baird [Aug 13] gave the first public demonstration of a modern television system in London, a repeat of his "Stooky Bill" tests of [Oct 2] 1925, although he had improved the scan rate to 12.5 pictures per second in the meantime. Baird also managed to attract some media attention this time, a reporter from *The Times*. He wrote on Jan 28th (on p.9), "The image as transmitted was faint and often blurred, but substantiated a claim that through the 'televisor,' as Mr. Baird has named his apparatus, it is possible to transmit and reproduce instantly the details of movement, and such things as the play of expression on the face."

A blue plaque commemorating the event can be found outside "Bar Italia" at number 22 Frith Street in Soho.

The first US public demonstration was organized by AT&T on April 17, 1927, a year later. Images were transmitted by wire between NYC and Washington.

Eiichi Goto

Born: Jan. 26, 1931;

Shibuya, Tokyo
Died: June 12, 2005

In 1954, while still a graduate student, Goto invented the parametron, an alternative to vacuum tube technology, which combined a ferrite core and a capacitor. He demonstrated its capabilities by building an entire computer using them – the PC-1 (Parametron Computer-1), completed in March 1958. It was one of the first general-purpose Japanese computers, and parametrons remained popular in Japan well into the 1960's when they finally gave way to transistors.

A somewhat unlikely story has it that Edsger Dijkstra's [May 11] article about programming language design, "Go to statement considered harmful" (1968), caused Donald Knuth [Jan 10] to remark, "Prof. Goto cheerfully complained that he was always being eliminated."

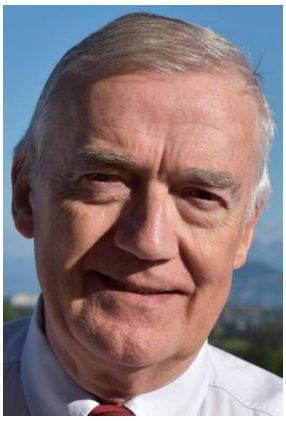
In the early 1970's, Goto developed a new LISP [April 15] system called HLISP, which introduced hash-consing to eliminate redundant memory usage and increase computation speeds.

Robert Cailliau

Born: Jan. 26, 1947;

Tongeren, Belgium

Cailliau was Tim Berners-Lee's [June 8] first collaborator on the World Wide Web project at CERN [Sept 29] and co-authored the second proposal for funding [Nov 12]. Cailliau had been the head of Office Computing Systems at CERN between 1985-1989, and had proposed an Apple HyperCard-based system [Aug 11] for researchers back in 1987.



Robert Cailliau (2019). Self portrait. CC BY-SA 4.0

Cailliau also helped guide the release of CERN's web technology into the public domain in 1993, using experience gained from working in CERN's Legal Service department. He has said of that decision: "As we were more interested in the excitement of making something useful than in getting rich, we decided to use the traditional CERN model for technology spin-off: make it freely available."

In 1994, Cailliau established the World Wide Web conference series, and designed the first WWW logo. He and Nicola Pellow [Aug 6] also wrote the first Mac Web browser, MacWWW (aka Samba).

Steven Levy

Born: Jan. 26, 1951;

Philadelphia, Pennsylvania

Levy is probably best known for his book, "Hackers: Heroes of the Computer Revolution" (1984), which portrayed computer folk as "adventurers, visionaries, risk-takers, [and] artists." He supported this somewhat dubious claim with a cast of colorful characters included: John Draper [March 11], Bill Gates [Oct 28], Richard Greenblatt [Dec 25], Steve Jobs [Feb 24], Marvin Minsky [Aug 9], and Richard Stallman [March 16].

Levy identified three categories of hackers: "true hackers" (e.g. John McCarthy [Sept 4]), "hardware hackers' (e.g. Steve Wozniak [Aug 11]), and "game hackers" (e.g. Ken Williams [Oct 30]). He even listed six key principles that define the hacker ethic:

1. Access to computers should be unlimited.
2. All information should be free.
3. Mistrust authority – promote decentralization.
4. Hackers should be judged by their hacking, not bogus criteria such as degrees, age, race, or position.
5. You can create art and beauty on a computer.
6. Computers can change your life for the better.

Levy is also known for having tracked down Albert Einstein's

brain, which had been whisked away during his autopsy in 1955

Another key early book about hackers, and other things, was "Computer Lib/Dream Machines" (1974) by Ted Nelson [June 17].

First Silicon Transistor

Jan. 26, 1954

Morris Tanenbaum created the first useable silicon transistor at Bell Labs, but the company decided not to promote his work because they felt the process was poorly suited to large-scale manufacturing.

Of course, Bell was already the home of the transistor [Dec 16], but ones made from germanium. Silicon was in many ways a better basis for the device because of its higher melting point, higher threshold voltage, and less susceptibility to current leaks.

With Bell out of the running, it was Gordon Teal [May 10], a former Bell Lab researcher now at Texas Instruments, who developed the first commercially-viable silicon transistor on April 14, 1954.

This poor decision by Bell meant the company became increasingly dependent on others for chip technologies in later years.

Space Cadet Arrives at MIT

Jan. 26, 1980

The Space Cadet keyboard was designed by John L. Kulp in 1978 and first used on Lisp machines [Dec 25] in MIT's AI Lab on this day.

The keyboard was equipped with seven modifiers – four bucky bit [Feb 15] keys: Control, Meta, Super, and Hyper, and three shift keys: Shift, Top, and Front (aka Greek).

This proliferation of modifiers meant that the other key typically had three symbols printed on them. This led to the rumor that it was possible to type over 8,000 different characters.

Part of the Space Cadet keyboard on the the Symbolics LM-2 Lisp machine. Photo by Dave Fischer. CC BY-SA 3.0

However, some people were less than happy with the keyboard, claiming that it demanded a user have three or more hands.

The Space Cadet's baroque layout had a major influence upon Emacs [March 16]. For example, its documentation uses "M-" as the prefix for Alt, although "M-" originally stood for the Meta key.

The Space Cadet was so-named because it was first employed with the CADR Lisp machine; CADET is pronounced in a very similar way to CADR. Of course, this begs the question of why the Lisp machine was called "CADR"? In LISP [April 15], the cadr function, returns the second item in a list, and CADR was the second Lisp machine developed. The first one was called the CONS machine, because LISP's cons returns the first element of a list.

The Space Cadet was inspired by the Knight keyboard, which was utilized with MIT's Incompatible Timesharing System [July 00].

Lotus 1-2-3

Jan. 26, 1983

Lotus Development Corp., founded by Mitch Kapor [Nov 1] and Jonathan Sachs in 1982, released Lotus 1-2-3, a spreadsheet application for MS-DOS [Aug 12]. 1-2-3 became the IBM PC's first killer app [Sept 8].

The prototype was written in C by Sachs for an Apple II [April 16] with a CP/M [June 22] card. But after the rise of the IBM PC, it was quickly recoded in x86 assembly. This meant it could bypass MS-DOS' slow I/O functions in favor of writing directly to the display. This made it much faster than its competitors, such as VisiCalc [Oct 19], the first spreadsheet program.

Sachs later recalled that the x86 source code "was a stack of paper about 8-10 inches high," but it compiled to just 85 KB.

The 1-2-3 name refers to the software's combination of spreadsheet capabilities with graphics and data retrieval.

VisiCalc was slow to respond to 1-2-3's threat, and by the end of the year, 1-2-3 was outselling it. Two years later Lotus bought the assets of VisiCalc from VisiCorp.

1-2-3's dominance of the PC market led to an increased demand for graphics cards, especially Hercules cards [Aug 00], to handle high-resolution text and graphics. Also, as spreadsheets got bigger, sales of extra RAM increased as well.

During the early 1990's, as MS Windows began to replace MS-DOS, so did Excel [May 2] displace 1-2-3. Showing its acumen regarding market forces, IBM bought Lotus on [July 6] 1995, as part of its master plan to compete against Microsoft.

Live Free or Die

Jan. 26-29, 1982

At the 1982 Winter USENIX Meeting [May 15] held in Santa Monica, DEC [Aug 23] began handing out novelty 'UNIX' license plates. They were the idea of Armando P. Stettner, a DEC engineer with marketing flair.

He had first considered modifying a "Sunshine State" license, then New Mexico's "Land of Enchantment", but settled on the New Hampshire License plate motif, "Live Free or Die". Armando felt the phrase encapsulated UNIX's minimalistic and libertarian orientation.

But Bill Shannon had got there first: in 1980, while working on UNIX at DEC, he registered his new Datsun 280ZX with the vanity plate "UNIX" in New Hampshire. By 1982, Shannon had moved to California to work at Sun Microsystems [April 1], and so Armando became the plate's owner, attached to his 1983 Toyota Celica Supra. The plate is currently held by Jon 'Maddog' Hall [Aug 7].

For more UNIX giveaways, see [June 6].

Eternal September

Jan. 26, 1994

"Eternal September", or the "September that never ended", was USENET [Jan 29] slang for Sept. 1993 when America Online (AOL [Oct 2]) began offering access to USENET, and AOL users began 'overwhelming' its forums.

The term was probably first employed by Dave Fischer in a post to alt.folklore.computers on this day: "September 1993 will go down in net.history as the September that never ended."

Even before AOL, Sept. had always been a stressful time for Internet old-timers as large numbers of college freshmen acquired USENET access. It took some time for these newbies to acquire the levels of "netiquette" expected by the bearded gatekeepers.

Lego Mindstorms Unveiled

Jan. 26, 1998

In the fall of 1984, LEGO's CEO, Kjeld Kirk Kristiansen, saw a TV interview with Seymour Papert [Feb 29] where he demonstrated how children could use the Logo language to control robot "turtles". Soon afterwards Kristiansen visited Papert at the MIT Media Lab [Dec 1], and launched a partnership. One result was LEGO Mindstorms, a hardware/software platform for the development of programmable robots based on LEGO bricks.

A working prototype was ready by 1987, but LEGO only trademarked Mindstorms – the name was a nod to Papert's 1980 book "Mindstorms: Children, Computers, and Powerful Ideas" – in the 1990's.

A first-generation RCX programmable brick. Photo by Mairi. CC BY-SA 3.0.

On this day, Mindstorms was unveiled at the Royal College of Art in London by Michael Resnick [Jan 8]. By December, the first run had sold out.

There have several successors: Mindstorms NXT (2006 and 2009), Mindstorms EV3 (2013), and Mindstorms Robot Inventor (2020).

The programmable brick in the first Mindstorms was the RCX (Robotic Command eXplorers). It contained a 8-bit Renesas H8/300 microcontroller with 32 KB of RAM for firmware and programs. The rest of the kit included motors and various sensors. Mindstorms creations have included a blackjack card dealer, a robot that crawls up walls, and a robotic toilet bowl scrubber.

The second generation NXT kit switched to a programmable brick utilized a 32-bit ARM processor [April 26] with 64 KB of RAM. The EV3 runs a version of Debian Linux [Sept 15], and boasts an ARM9 and 64 MB of RAM.

Mydoom Detected

Jan. 26, 2004

Mydoom became the fastest-spreading e-mail worm ever, exceeding the previous records set by Sobig [Aug 18] and ILOVEYOU [May 5]. It caused an estimated $38.5 billion worth of damage.

For a few hours, the worm's slowed overall Internet performance by approximately 10% and average Web page load times by 50%. Mydoom was responsible for sending approximately one in ten e-mail messages on this day.

It spread itself via a bogus message about an email transmission error, with the worm hidden inside an attachment. Once executed, Mydoom would propagate itself to all the people in the user's address book, and also via the Kazaa peer-to-peer platform.

The worm opened a backdoor on its host computer, and launched a denial of service attack on the SCO Group. SCO was probably chosenbecause of its then-conflict over the ownership of UNIX; see [March 6], [Aug 10].

The worm was named by Craig Schmugar at McAfee.com [Sept 18] because of a line in its code that included the word

"mydom". He later said, "It was evident early on that this would be very big. I thought having 'doom' in the name would be appropriate."

For more virus nasties, see [March 26; April 30; May 5; July 13; July 15; July 17; Sept 5; Oct 26; Nov 21].

Day 15,000

Jan. 26, 2011

UNIX time [Jan 1] had existed for 15,000 days on Wednesday, Jan. 26, 2011. It will have lived for 20,000 days on Friday Oct. 4, 2024, which can be confirmed by typing:

```
date -d @$((20000*86400))
```

86400 is the number of seconds in one day, 60*60*24

To find the current time in seconds, use: `date +%s`

For other date/time related problems, see [Jan 1].
