April 3rd

Dionysius Lardner

Born: April 3, 1793;

Dublin, Ireland
Died: April 29, 1859

Lardner was a prolific popularizer of science, including being the editor of the 133-volume "Cabinet Cyclopædia" (1830–1844). In 1834 he developed a series of lectures on Babbage's Difference Engine [June 14], which he took on tour around England, and converted into the best contemporary written account of Babbage's work which appeared in the *Edinburgh Review* in July. Although the article contained a few mistakes and left out some crucial details, it inspired the Swedish inventor Georg Scheutz [Sept 23] to build a working Difference Engine.

Lardner was sometimes ridiculed for his predictions, many of which proved drastically wrong. For example, he warned that high speed train travel was impossible because passengers would be suffocated by the smoke in the tunnels.

The Pony Express

April 3, 1860

The Pony Express mail service began operating between Saint Joseph, Missouri, and Sacramento, California, with the pledge to "deliver the goods in ten days or less" . It was the first high speed postal service in the USA, but by charging $5 an ounce per package, very expensive. However, in terms of speed, it was the clear winner: previously letters could be sent from the East to the West coast either by sea, which took about a month, or by stagecoach which took three weeks.

The Pony Express route was nearly 2,000 miles long, and split into 190 stations. Each rider generally rode 75 to 100 miles of the route, and changed horses every 10 to 15 miles.

The company's fastest delivery came in March 1861, when riders carried Lincoln's inaugural address from Nebraska to California in just seven days, 17 hours.

The three founders, William Russell, Alexander Majors, and William Waddell, never made a profit on the service due to its high operating costs and their failure to secure a mail contract with the government. The final nail in the coffin was the completion of the first transcontinental telegraph line on [Oct 24] 1861.

Although the service ceased operating on Oct 26, the branding lived on: from 1866 until 1889, the "Pony Express" logo was used by Wells Fargo, the stagecoach and freight company, and the US Postal Service later adapted "Pony Express" as a trademark for some of its services.

That the Pony Express was remembered was in no small part because of the prominence of ex-riders in William "Buffalo Bill" Cody's Wild West shows. Indeed, he claimed to be have been a rider himself, at the age of 14, although most evidence suggests he was probably still in school in Kansas at the time.

Malcolm Douglas McIlroy

Born: April 3, 1932;

New Jersey

McIlroy made numerous contributions to UNIX [Dec 21], perhaps the most significant being software pipes [Oct 11], and his storage allocator, malloc. He was also responsible for an enormous number of key utilities, including "echo", "sort", "tr", "cal", "tee", "diff" for file comparison (which utilizes his Hunt–McIlroy algorithm), "spell", "join" for database manipulation, "graph" for plotting tabular data, and "speak".

Douglas McIlroy (2011). Photo by Denise Panyik-Dale. CC BY 2.0.

Rob Pike [Nov 10] has called McIlroy "The unsung hero of UNIX".

McIlroy participated in the design of PL/I [March 1], contributed to C++ [Oct 14], and wrote compilers for LISP [April 15], Altran (an algebraic manipulation system), and TMG (a compiler-writing tool). He also coauthored Darwin [Aug 00], the first game to involve self-reproducing programs.

His legendary prowess as a programmer inspired a number of amusing sayings:

"In 1984, the Department of Justice broke up AT&T because they had a monopoly – on Doug McIlroy."

"At Bell Labs, computers regularly crashed in fear when Doug McIlroy entered the room."

Telnet RFC

April 3, 1972

Jon Postel [Aug 6] published the first official definition of telnet as RFC 318 [April 7], with the title "Ad Hoc Telnet Protocol". However, telnet had been around since C. Stephen Carr's RFC 15 at the end of 1969, and had been extended in a number of other RFCs.

Telnet (short for "teletype network") supports bidirectional text-oriented

communication, which is typically used to implement a command-line interface between a client machine and a server.

Sadly, telnet was designed in more trusting times – for example, it doesn't encrypt any data (including passwords). As a result, in recent years it's been replaced by SSH (Secure Shell) [July 12] which provides much the same functionality, with the addition of strong encryption and public key authentication.

First Handheld Mobile Phone Call

April 3, 1973

Motorola's [Sept 25] Martin Cooper made the first call from a handheld mobile phone (as distinct from a car phone) to Joel S. Engel at AT&T. Motorola and AT&T were competitors in phone technology at the time, and Cooper later admitted that his choice of who to contact was a bit of a joke.

Cooper made the call during an interview with reporters located near a base station in NYC, on 6th Avenue, between 53rd and 54th Streets.

The call was made on a prototype of the DynaTAC (Dynamic Adaptive Total Area Coverage) 8000X, which ten years later (Sept. 21, 1983), would become the first commercially available mobile phone, costing $3,995.

The prototype weighed 2.5 lbs., with dimensions that earned it the nickname "the shoebox" (22.86 cm long, 12.7 cm deep, and 4.44 cm wide). It only held enough juice to run for about 20 minutes, and then took some ten hours to recharge. However, Cooper kindly pointed out that the limited battery life wasn't a problem since the weight of the phone made it difficult for an ordinary person to hold up to their ear for much longer than 20 minutes anyway. Also, 2.5 lbs. was certainly better than the weight of most car phones that could easily exceed 30 lbs.

Martin Cooper holding a DynaTAC cellphone in 2007. Photo by Rico Shen. CC BY-SA 3.0.

Motorola was granted a patent for Cooper's radio telephone system (US 3,906,166) on Sept. 16, 1975, but the first commercial cellular network only became operational in Chicago on [Oct 13] 1983.

The Burr-Brown DAC

April 3, 1981

Jimmy Naylor and other members of the Burr-Brown Corporation filed a patent for "A Digital-to-Analog Converter having single-ended input interface circuit".

The technology was used in Burr-Brown's PCM52, the world's first single chip digital-to-analog converter (DAC). It helped make high-quality CD players affordable, and gave an enormous push to the transformation of music distribution and playback from analog to digital.

With the help of the PCM, Burr-Brown dominated the digital audio data converter market until they were acquired by Texas Instruments in 2000 for $7.6 billion.

The Burr-Brown DAC was mentioned in the remake of the movie "The Italian Job" by Lyle (aka "Napster") [June 2]. He says he wants a stereo with Burr-Brown DAC's that play loud enough to blow women's clothes off.

Osborne 1

April 3, 1981

The Osborne Computer Corporation released the Osborne 1, the first mass-produced 'portable' microcomputer (although at 24.5 lbs., it was more "luggable" than portable). One reviewer described it as looking like "a cross between a WWII field radio and a shrunken instrument panel of a DC-3." Nevertheless, in the eight months following the release, the company sold 11,000 units.

Adam Osborne's [March 6] originally plan was for a machine light enough to be carried as luggage and small enough to fit under an airline seat. It also had to be cheap enough to be a credit card impulse buy (in those days a card typically had a limit of of $2,000).

It featured a Z80 processor [March 9], a 5-inch screen, 64K of memory, CP/M [June 22], and a bundle of office software, including WordStar [Sept 00] and the SuperCalc database.

Osborne enlisted the help of Lee Felsenstein [April 27] to design the machine, who Osborne later characterized as an "unrepentant Berkeley radical". Felsenstein's ideas were heavily influenced by the Xerox NoteTaker, a prototype developed at Xerox PARC in 1976 by Alan Kay [May 17].

The machine's main deficiencies were a tiny screen and use of single sided, single density 90K floppy disks that couldn't hold enough data for practical business work. Later competitors, such as the Kaypro II [May 8], had double density drives and a 9" screen which could display 80×25 text.

One advert for the Osborne 1 showed a female executive dashing to an airport gate with an Osborne held comfortably in

her hand. Osborne later admitted that the photograph was elaborately staged to hide the weight of the machine.

For a 1950's version of 'portable', see the RECOMP II [Jan 00].

National Pac-Man Day

April 3, 1982

Atari declared today to be "National Pac-Man Day" to celebrate the release of the first console version of Pac-Man [Oct 26] for the Atari VCS / 2600 [Oct 14]. It rapidly became the best-selling 2600 cartridge ever, but sales fell off nearly as quickly when news got out of its poor gameplay and graphics. This was probably related to the fact that the game had been ported to the 2600 in just three months.

The outcome was that Atari produced 12 million cartridges, but 'only' sold seven million. However, the damage to the company's reputation had longer term effects, and many historians argue that this game was a major reason for the North American video game crash of 1983 [Dec 7]. Although E.T. [Aug 18] must also shoulder some of the blame.

IBM 5140 Convertible

April 3, 1986

The IBM 5140 PC Convertible was the company's first laptop, following on from the IBM 5155 Portable [Feb 16], which at 30 lbs. was better termed a "luggable". Unfortunately, the 5140 was no bean pole itself, weighing 13 lbs., a lot compared to other laptops of the time.

IBM called it a "convertible" not because it had a sun roof (it didn't), but because the 640 x 200 monochrome LCD screen could be disconnected, and the machine plugged into a conventional monitor instead. That was just as well since the LCD screen was so small that letters were compressed to half their normal size, making word processing tasks particularly frustrating.

An IBM Convertible. Photo by Fred Jan Kraan. GFDL.

Another issue was its bulky expansion technology based around modules that were plugged into the back of the 5140. In practice, this meant that even when treated as a desktop machine, the 5140 had trouble fitting onto a regular desk if all the useful modules were also attached.

The machine sold poorly, but IBMs next laptop attempt was the phenomenally successful ThinkPad [Oct 5].

Disassembly Illegal (for a while)

April 3, 1992

A US District Court ruled that Accolade Inc. had infringed Sega Enterprises' copyrights when it reverse-engineered the Sega Genesis [Oct 29] game cartridge format. Accolade had passed the information on to developers, who had used it while coding a puzzle game called Ishido.

The ruling was an ugly landmark in copyright law as it effectively made the reverse-engineering, or disassembly, of programs illegal.

However, on Aug. 28, 1992 a new court ruling reversed the decision, stating that when reverse engineering is the only means of gaining access to unprotected aspects of a program, then it's a type of fair use.

RealPlayer Released

April 3, 1995

RealPlayer was one of the first tools capable of streaming audio [Sept 5] over the Internet; it was developed at RealNetworks, founded by Rob Glaser in 1994, and employed that company's proprietary audio format (RealAudio). RealPlayer gained support for streaming video in 1997.

By the early 2000's, more than 85% of the streaming content on the Internet was in RealAudio format, and on June 16, 2004, Glaser received the Music Visionary Award.

Even though RealPlayer was the dominant media player during the dot-com boom [Aug 9], it gradually fell from favor. The software was increasingly perceived as being rather user-unfriendly, and was also criticized for containing adware and spyware. Competitors such as Apple (with iTunes [April 28]) and Adobe (Flash [Jan 6]) began offering tools that were easier to use.

Microsoft's Thumb

April 3, 2000

Prev: [Nov 5] Next: [Sept 6]

In the case of US vs. Microsoft, Judge Thomas Penfield Jackson issued a 43-page ruling that Microsoft had acted illegally to protect its OS monopoly, by pressing "an oppressive thumb" down upon its competitors in an attempt to monopolize the browser market.

On June 7, Judge Jackson went even further, ordering the breakup of Microsoft into two companies: one to develop OSes and one for its other applications. Microsoft immediately announced that it would file an appeal, and savvy analysts predicted that the case

could be tied up in legal wranglings for another 20 years.

However, Gates wouldn't have to sit in court through it all, since he'd handed Microsoft's CEO role to Steve Ballmer [March 24] on [Jan 13]. Many analysts thought Gates' wish to avoid more court visits was a major reason for the change.

First iPad Released

April 3, 2010

Although the iPad debuted some three years after the iPhone [June 29], wunderkind Jony Ive [Feb 27] had wanted the tablet to come out first. However, Steve Jobs [Feb 24] had persuaded him that the phone was a better platform for innovation

Indeed, the iPad ended up adopting many of the iPhone's features, such as a high-definition camera , access to the iTunes Store [April 28], and audio-video capabilities. It's key difference was a 9.7" screen.

Apple also leant from Microsoft's errors with the Pocket PC [Jan 4], and had the iPad run iOS (the iPhone's OS) rather than Mac OS X, along with applications developed specifically for its touchscreen interface.

The iPad was initially derided as a "giant iPod touch" [Oct 23], less capable than a similarly priced netbook [Oct 16], but sales were nevertheless extremely good.
