May 26th

Dunkirk Dream

May 26 - June 4, 1940

David B. Parkinson, an engineer at Bell Labs, dreamt he was at Dunkirk close to an Allied artillery piece, with every shell hitting a German plane. (This refers to the real-world evacuation of British and other Allied forces from the north coast of France during WWII.)

Parkinson wrote of the dream: "After three or four shots one of the men in the crew smiled at me and beckoned me to come closer to the gun. When I drew near he pointed to the exposed end of the left trunnion. Mounted there was the control potentiometer."

Upon waking, Parkinson set about implementing the anti-aircraft gun control he had seen in his dream, combining negative feedback with electronically controlled servomechanisms, to create the M-9 gun director.

The accuracy of the M-9 lowered the number of shells that needed to be fired from thousands to hundreds. For instance, in one week in Aug. 1944, M9s were credited with destroying 89 of the 91 V-1 rockets launched at England. Eventually more than 3,000 M-9s were built.

Howard (Ward) G. Cunningham

Born: May 26, 1949;

Michigan City, Indiana

Cunningham and Kent Beck [March 31] are passionate proponents of extreme programming, Agile [Feb 11], and design patterns [Oct 21]. They also invented Class-responsibility-collaboration (CRC) cards, a brainstorming tool used when designing object-oriented software.

Cunningham is also known for creating the first wiki, "WikiWikiWeb". On [March 25] 1995 he began using it on the website of his software consultancy, Cunningham & Cunningham (c2.com), as an add-on to his Portland Pattern Repository.

When asked in 2006 whether he had considered patenting the concept, he explained that he thought the idea "just sounded like something that no one would want to pay money for."

Cunningham's Law: "The best way to get the right answer on the Internet is not to ask a question, it's to post the wrong answer."

Ward Cunningham (2004).

Cunningham holds an Amateur Radio Extra Class license, and uses the call sign Kilo Nine Oscar X-ray, K9OX.

INTERCAL

May 26, 1972

Donald R Woods and James M Lyon of Princeton completed the rigourous design process for the INTERCAL language sometime this morning. Their overriding aim was to create a language unlike any other; for the most part, they succeeded.

The language includes commands such as "IGNORE", "FORGET", "ABSTAIN", and modifiers such as "PLEASE". This last keyword provides two reasons for the compiler to reject a program: if "PLEASE" doesn't appear often enough then the program will be rejected as insufficiently polite. However if "PLEASE" appears too frequently then the program is rejected for being excessively formal. This feature was left undocumented to inspire programmers to code in an exploratory fashion.

INTERCAL understands numerical input of course, but only when the digits are spelled out, and output uses an extended form of Roman numerals.

Informative error messages were seen as essential, including:

```
E111 COMMUNIST PLOT
DETECTED, COMPILER IS
SUICIDING

E405 PROGRAM REJECTED FOR
MENTAL HEALTH REASONS

E666 COMPILER HAS
INDIGESTION
```

Even the name breaks with tradition, with lNTERCAL standing for "Compiler Language With No Pronounceable Acronym".

INTERCAL may have been the first *esoteric* programming language – one dealing in weird ideas, naturally hard to program with, and probably meant as a joke. Two other popular languages of the same ilk are Brainfuck [June 9] and Befunge, a 2D fungeoidal language grown by Chris Pressey.

Johnny Mnemonic

May 26, 1995

The movie "Johnny Mnemonic," directed by Robert Longo and starring Keanu Reeves, was the first major motion picture to portray cyberspace [Sept 3]. It was very loosely based on a short story by William Gibson.

Johnny is a "mnemonic courier" with a data storage device implanted in his brain. Working against time, the enbattled (but always cool) e-mailman must deliver the information before he dies from the burden, or is killed by the Yakuza. Gibson

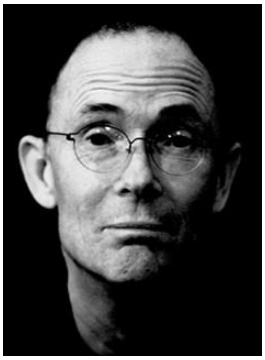
called it a movie about "the politics of information."

The film was probably the first to use hand gestures as a user interface – at one point Johnny manipulates a virtual segmented pyramid to gain access to a file.

At another point, Johnny asks for an "iPhone" [Jan 9], 12 years before it was launched. In fact, Johnny was referring to an "Eyephone", an early head-mounted interface designed by Jaron Lanier [May 3].

Another dated reference is the capacity of the data chip in Johnny's head – a mere 320 GB, but that's an improvement over the story which mentions "hundreds of megabytes" (but it was written at the start of the 1980's).

Sony promoted the film heavily via the Internet, including running an online scavenger hunt with $20,000 in prizes. Gibson was also deployed to Cyberspace to field questions from fans. He later likened the experience to "taking a shower with a raincoat on" and "trying to do philosophy in Morse code."



William Gibson (2007). Photo by Frederic Poirot

Reeves would revisit cyberspace four years later in the celebrated Matrix trilogy [March 31].

Internet Tidal Wave

May 26, 1995

Bill Gates [Oct 28] posted an e-mail memo around Microsoft entitled, "The Internet Tidal Wave," declaring the Internet to be "the most important single development" since the IBM PC – one that must be assigned "the highest level of importance." The memo also described Netscape [March 25] as a "new competitor 'born' on the Internet."

Although the phrase "Don't shut the stable door after the horse has bolted" may come to mind, that's not entirely fair. Back in Oct. 1994, Microsoft had made Benjamin Slivka the leader of the "Internet Explorer Project" after he'd expressed the need for a browser in Windows 95 [Aug 15]. His team consisted of six people.

Even earlier, on [Jan 25] 1994 James Allard had published a 16-page memo entitled "Windows: The Next Killer Application on the Internet."

The day after Gates' e-mail, Slivka responded with a memorandum of his own, entitled "The Web is the Next Platform", which he'd already been circulating to interested individuals in the company.

As late as the previous month, Gates' view had been that because the Internet was free then: 'There's no money to be made there. Why is that an interesting business?' "

On June 1, 1995, forty Microsoft executives gathered at the Red Lion Hotel in Bellevue, Washington, to brainstorm the company's Internet strategy. Gates gave a 20-minute talk based on his Tidal Wave missive. Later, Slivka's scheduled 15 minute talk stretched to more than an hour. He said afterwards: 'I got some people riled up.' At one point, Slivka proposed that Microsoft *give away* some software on the Internet, as Netscape was doing. Slivka recalled that Gates, 'called me a communist'.

On [Aug 16], Internet Explorer made its debut, released as part of the add-on Plus! package for Windows 95. Later versions were free downloads.

On [Aug 24], Microsoft launched MSN (Microsoft Network), as a direct competitor to AOL [Oct 2].

AMD K6-2

May 26, 1998

The AMD [May 1] K6-2 processor was intended to compete against the Intel Pentium II [March 22]. In particular, it supported the 3DNow! instruction set which offered faster floating point calculations, albeit only after some careful coding. 3DNow! was intended for FPU intensive applications that didn't require high precision, as in games.

Another change from the original K6 was an upgraded system-bus interface called Super Socket 7, which offered speeds of up to 100MHz instead of the more usual 66MHz available back then.

Similarly to the K6, the K6-2 didn't directly execute x86 instructions. Instead, it translated each one into one or more simpler RISC86 instructions stored in a scheduler buffer. On each clock cycle, the scheduler could send up to six instructions to ten independently executions units, which allowed them to run concurrently.

The K6-2 became the core member of the K6 family, and gave AMD the financial clout to develop the Athlon (aka the K7) [June 23], one of its most successful architectures.

Radiation Error

May 26 - June 1, 2001

The "National Oncologic Institute" (Spanish: Instituto Oncológico Nacional) in Panama City specializes in cancer treatment.

Doctors utilized American therapy planning software for radiation treatments which controlled the placement of metal shields called "blocks" to protect healthy tissue during radiation therapy.

Although the software limited the number of blocks to just four, the canny doctors had

discovered a way to trick the software into utilizing five shields by combining two blocks into one, albeit with a hole in the middle.

What the doctors didn't realize was that the software produced very different radiation safety answers depending on how the hole was positioned, and might even recommend up to twice the necessary radiation exposure.

This magnitude of error occurred several times between Aug. 2000 and March 2001, resulting in the deaths of at least eight patients, while another 20 received overdoses likely to cause significant health problems in the future.

A panel of experts from the International Atomic Energy Agency was convened on this day to recommend what to do. The software was recalled, and the physicians, who were legally required to double-check the software's calculations by hand, were prosecuted.

For more radiation problems, see [Feb 10]. For other numerical errors, see [Feb 25], [June 4], [Aug 1], [Sept 23], [Oct 24].