

August 21st

Musical Dice

Aug. 21, 1787 ??

The "Musikalisches Würfelspiel" (German for "musical dice game") used dice to randomly generate music from precomposed options. These types of games were quite popular in the 18th century, perhaps the most famous being the one attributed to Wolfgang Amadeus Mozart (1756 – 1791), in his manuscript K. 516f.

It was first published in 1792 (or 1793) after Mozart's death, and the original manuscript has never been found. Most Mozart scholars say it's unlikely to be his work, although Mozart was fond of mathematical puzzles.

The idea is to compose a 16-measure "minuet" by rolling dice to decide which of 176 possible Minuet measures and 96 possible Trio measures to use.

Two dice determine each of the 16 Minuet measures (i.e. 11 possibilities for each of the 16 measures). One die is used to determine each of the 16 Trio measures (i.e. 6 possibilities for each of 16 measures). So there are $11^{16} * 6^{16} \approx 1.3 * 10^{29}$ possible compositions.

There are other variations of this idea attributed to Mozart, including one that produces 11¹⁴ waltzes ($3.8 * 10^{15}$).

Some sources claim that K. 516f was finished on this day, but it could have been completed between May and October of this year.

There are several Web sites and programs which implement Mozart's game (e.g. John Chuang's at <http://sunsite.univie.ac.at/Mozart/dice/>).

Ben Shneiderman

Born: Aug. 21, 1947;
New York City

Shneiderman works in the fields of human-computer interaction and information visualization, and has developed tools such as the treemap, dynamic query sliders, hierarchical clustering, and temporal event sequences. His 1986 paper, "Designing the User Interface: Strategies for Effective Human-Computer Interaction," first presented his popular "Eight Golden Rules of Interface Design."

He was the co-inventor of the Nassi-Shneiderman diagram, a structured programming flowcharting technique. Their first paper was rejected with the anonymous referee stating: "I feel that the best thing the authors could do is collect all copies of this technical report and burn them, before anybody reads them."

A quote: "A picture is worth a thousand words. An interface is worth a thousand pictures."

Stephen McConnell Case

Born: Aug. 21, 1958;
Honolulu, Hawaii

After Case joined Quantum Computer Services, he revamped the company's strategy to focus on the Quantum Link [Nov 5] online service for the Commodore 64 [Jan 7]. This grew into the behemoth, America Online (AOL) [Oct 2].

A large part of the reason for AOL's growth was Case's push for innovative online titles, including the graphical chat environments Habitat ([June 23] 1986) and "Club Caribe" (1989), the first online interactive fiction series "QuantumLink Serial" ([Nov 00] 1988), and the first graphical MMORPG "Neverwinter Nights" [?? 1953].

AOL merged with media giant Time Warner [Jan 11] in 2001 in a \$164 billion deal that was

eventually deemed one of the worst in history. Case resigned as AOL chairman in 2003, and left the Time-Warner board in 2005.



Steve Case (2011). Photo by the Financial Times. CC BY 2.0.

As a boy, Case attended the Punahou School in Hawaii, where former President Barack Obama also studied.

A quote: "All great ideas start as weird ideas. What now seems obvious, early on, is not obvious to anybody."

Sergey Mikhaylovich Brin

Born: Aug. 21, 1973;
Moscow, Russia (But his family emigrated to the US when he was 6 years old.)

Brin and Larry Page co-founded Google. The pair met when Brin was assigned to give Page a tour of Stanford in the summer of 1995. Later, they teamed up to work on a search engine research project called BackRub [Sept 7], that was renamed Google on [Sept 15], 1997. Google was incorporated on [Sept 7] 1998, although its official birthday is [Sept 27], 1998.

Brin used to run the secretive Google X division, which invented Google glass [April 15], and organized its famous sky diving demo [June 27]. Brin was also involved in the Google driverless car project.

One well-connected industry observer as said, "Sergey is a beloved oddball of a guy, and unlike Larry Page and Eric Schmidt [April 27], he's the one who gets to do the cool stuff at Google."



Sergey Brin (2010). Photo by Steve Jurvetson. CC BY 2.0.

In Dec. 2019, Brin and Page relinquishing control of the company to then-CEO Sundar Picha. This made official a step-back from management that had been apparent since 2015 when Google was reorganized as Alphabet

IBM Meets Microsoft, Part 1

Aug. 21, 1980

Next: [Aug 22]

An IBM team from Boca Raton, led by Jack Sams (director of software development), visited Microsoft to discuss licensing its programming languages for the forthcoming IBM PC [Aug 12]. At the time, Microsoft BASIC had tens of thousands of users, while IBM's BASIC, while excellent, had few. Involving Microsoft was part of Don Estridge's [June 23] plan to get the PC ready as quickly as possible.

At some point the team asked Microsoft about OSes, and Bill Gates [Oct 28] referred them to Digital Research. The group phoned Digital Research's founder Gary Kildall [May 19] to

arrange a meeting for the next day [Aug 22].

Steal This Film

Aug. 21, 2006

"Steal This Film" is a documentary by Jamie King about Swedish piracy culture, which includes interviews with people involved in the "Pirate Bay" torrent site [Aug 10], the "Piratbyrå" lobby group, and the political "Pirate Party".

Part One (32 minutes long) was released on this day, and Part Two (44 minutes) was released on Dec. 28, 2007.

This documentary should not be confused with "Steal This Movie!", a 2000 film about 1960s radical figure Abbie Hoffman, or Hoffman's 1971 book, "Steal This Book". Neither is it related to "Steal This Album!", the third studio album of "System of a Down", or the "Steal This Episode" episode of "The Simpsons" [Feb 15].

Porn Filter Cracked

Aug. 21, 2007

Tom Wood, aged 16, of Melbourne, made headlines after cracking the Australian Government's internet porn filter, a core element of its "Protecting Australian Families Online" initiative. The project had cost in excess of \$84 million, including an advertising blitz which delivered a reassuring booklet on the filter's efficacy to every household in the nation.

Wood reported that his hack had taken about 30 minutes after the filter's website went live. "It's a horrible waste of money," he said. "They could get a much better filter for a few million dollars made here rather than paying overseas companies for an ineffective one."

The Government later released an Australian-designed filter, called Integard. Objectively it was definitely better, since it took Wood 40 minutes to crack.

BioShock

Aug. 21, 2007

BioShock was a first-person shooter developed by Ken Levine, and released by 2K Games for MS Windows and the Xbox 360 [Nov 22].

The story line has the protagonist, Jack, fighting for survival against the genetically modified Splicers in the underwater city of Rapture constructed by visionary business magnate Andrew Ryan.

BioShock was praised for its storyline, which contains many references to objectivism [Aug 7], as promoted by Ayn Rand [Jan 25], while incorporating dystopian influences from authors such as George Orwell [June 8]. Andrew Ryan is a partial anagram of Ayn Rand.

BioShock was also influential because of its steampunk [Dec 30] chic, and use of Art Deco.
