The History and Sociology of Computer Science and Technology II *extras

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Abstract Primary sources (hacker magazines, blog posts, scientific publications...), topics (BSD, electronic music) and left-over...

- *USENIX Proceedings* and other publications. usenix.org/publications
- Operating systems, etc.. Open access.
- *Journal of Functional Programming*

Pearls are rather small studies of interesting functions, programs or programming techniques, or principles. e.g. **remdup** (short for rem-ove dup-licates)

PRIMARY SOURCES : HACKER MAGAZINES
— *Mondo 2000*, preceded by *Reality Hackers*

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Articles include pieces such as “Big Brother Isn’t Dead, He’s Just Subcontracting”, and timely edgy but contestable statements like “*the world isn’t run by money [but] ones and zeroes*” (8, p. 14), “Irresponsible journalism” (ibid.), “Hyperwebs” (1?, p. 26)...

Notable: covers almost always feature women, as does the interior imagery. St. Jude is a regular contributor.

The first eight issues were published between c 1990 and 1992, while R. H.’s publication spanned the 1980s, to give a rough time indication.

Reality Hackers was less polished, while also appearing more explosive in content (several articles on AIDS we aren’t quite sure what to make of).

Predecessors to *Wired*.

— 2600 (1984-...)
“The Hacker Quaterly”

BOOKS

— Bentley, Jon. *Programming Pearls*.

— Salus, P.. 1994. *A Quarter Century of UNIX*. Addison-Wesley.
(esp. chapters 29, 25; contains many quotes/testimonies) Important information about the history of BSD, towards gradual liberation :

“Keith Bostic would get up at the semi-annual USENIX conferences and announced the progress of his - the CSRG’s - project : about 35% of the programs are AT&T code free; about 55% ...; about 77%... Whatever the progress - and there always was some progress - there were cheers and loud applause. (...) In 1993, [a source license] was around \$200,000. (...) John Gilmore and several others nudged the CSRG to produce their license-free version. (...) In the autumn of 1988, at the BSD Workshop, Keith, Mike Karels, and Kirk McKusick announced the completion of the BSD Networking Release 1. It appeared that November. NET 1 was a subset of the current Berkeley system at the time, which was quite similar to 4.3-Tahoe. It included source code and documentation for networking portions of the kernel, C library and utility programs. It was available without evidence of any prior license (AT&T or Berkeley), and was redistributed via anonymous FTP. The source files contained a Berkeley copyright notice and a legend that allowed redistribution without attribution. Two-and-a-half years later, in June, 1991, at the USENIX conference in Nashville,

BSD Networking Release 2 was available. NET 2 contained more than just networking code, but like NET 1 it was available with no prior license. The new features included a new virtual memory system derived from Carnegie-Mellon University's Mach system, which had been ported at the University of Utah, and a port to the Intel 386/486 system."

DOCUMENTARIES

— Rovner, Lisa. *Sisters with Transistors* (2020)

Full-length, on electronic music's female pioneers. "[T]he story of dreams enabled by technology". Features Wendy Carlos (*Switched-On Bach*, *The Shining* soundtrack), Laurie Spiegel, ...

— "Laurie Spiegel" (2019). Waveshaper. circa 25 minutes

1. Bell Labs 2. Voyager 3. The Expanding Universe

"most of the time that I was out there I was what they call "a resident fish" visitor, I was given residence status and the right to come in and use the lab and the equipment. And, I didn't pay for it, and I wasn't paid for it. But, then for what the hell I'll assist, and then they actually hired me."

— *High Score* (2020) Netflix

History of video games (from at least Pacman onward). Includes segments on Jerry Lawson, Roberta Williams, John Tobias, Rebecca Heineman.. plus the usual.

"Gerald 'Jerry' Lawson helped invent the first video game console with interchangeable game cartridges, players were limited to a preset selection of games built into systems."

(*"Their Dad Transformed Video Games In The 1970s"*, *NPR*, 17/09/21)

Other topics include early competitive play, modding, online multiplayer games...

Romero :

"Basically, everything that you see in the game can be changed. But, we didn't allow anyone to modify Doom if they didn't buy it [laughing] So, if you have the shareware version of Doom, you can't run levels, or mods, or anything. (...) letting people mod a game kind of gives them a taste of what it's like to make a game."

PRIMARY SOURCES : BLOGS

— Swartz, Aaron. 2009. "Margo Seltzer". aaronsw.com/weblog/margo

— Kuper, Lindsey. 2014. "Rejections". composition.al/blog/2014/04/29/rejections

VIDEO GAMES

— System Shock (1994) and Deus Ex (2000)

The, very Gibson inspired, backcover for *System Shock*'s box read :

`"Your're a renowned hacker, the most notorious cyberspace thief in the corporate world. (...) Citadel now teems with [cyborgs, robots], all programmed to serve SHODAN, a ruthless [a.i.]."`

Here is *Deus Ex* as presented by Warren Spector himself (a lot of which could be applied to System Shock, probably):

"The game I'm most proud of is Deus Ex (...) let's talk about what Deus Ex actually is : it's a game set in a near-future dystopic version of our real world. It's a world where conspiracy theories are true; and it's kind of James Bond meets the X-Files by way of Neuromancer. (...) It was a genre mash-up : it was part immersive simulation, part role playing game, part first-person shooter, and part adventure game." (GDC. 2017)

— Enter the Matrix (2003)

"You have it. Buried deep inside you.
Hidden, perhaps from yourself."

Compare with e.g. Matrix 4's close "friendships"/camaraderie on Io...

NEWSPAPERS

— Allen, Samantha. 2018. "How Mary Ann Horton Invented the Email Attachment, Then Revolutionized...". *Daily Beast*, 30/04.

*"She calls **uuencode**—short for Unix-to-Unix-encoding—a "dumb little program" that she wrote in 1980, even though it has since gained wide recognition as the "forerunner to e-mail attachments." Horton tells The Daily Beast that she simply "contributed step two of four steps" in the development of the modern e-mail attachment, allowing early Internet users to encode a binary file so it could be sent in an e-mail and get decoded on the other end (...)"*

— Metz, Cade. 2012. "Before Google and GoDaddy, There Was Elizabeth Feinler" *Wired*, 10/06.

"From 1972 to 1989, Elizabeth "Jake" Feinler ran the Network Information Center [NIC] at the Stanford Research Institute in Menlo Park, California – the place that oversaw the use of internet addresses before the arrival of commercial outfits like GoDaddy and Network Solutions. If you wanted a domain name, you came to Jake."

— "Cyberpunk 2077 dev breaks promise, will force employees to work six days a week". *The Verge*, 29/09/20.

— "CD Projekt facing class action lawsuit over Cyberpunk 2077 release" *Polygon*, 24/12/20.

— FAIR. 1996. "Exploding ABC's Unabomber Hoax". 01/06, <https://fair.org/>

A review by a media watchdog of "Unabomber" reporting among (mainstream) journalists.

"the list didn't come from the Earth First! Journal—it came from an obscure eco-anarchist 'zine called Live Wild or Die, which in 1989 reproduced an anti-environmental conference's official list of sponsors and scrawled "Eco-Fuckers Hit List" across the top."