Demoscene: 30+ years of creative programming

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Demoscene?

- A technologically and creatively oriented community
 - A subculture? Hackers? Hobbyists?
- Started already in the early 1980s
- Main artifact: demos, real-time audiovisual presentations (and a lot more)

Why interesting or notable?

- A pre-Internet worldwide community
- Tens of thousands of works
- Mirrors the changing times, cultural adoption
- Crossover with games, media art and so on

It's cultural heritage now(!)



Demoscene, musical saw playing and horsemanship of the Roma – 12 new elements inscribed on the National Inventory of Living Heritage

09.04.2020 - Intangible Cultural Heritage

Whoami

- Demo research since 2004
 - Demoscene Research with Antti Silvast
 - Articles, WiderScreen thematic issue
- One of them, too. Mostly as a coder and a graphician (1991–)

Very common among other researchers as well

Thesis

University of Turku

TIMES OF CHANGE IN THE DEMOSCENE

A Creative Community and Its Relationship with Technology

Markku Reunanen

TURUN YLIOPISTON JULKAISUJA – ANNALES UNIVERSITATIS TURKUENSIS Sarja - ser. B osa - tom. 428 | Humanoria | Turku 2017

Outline

- General properties
- A chronology
- Now and in the future
- Readings and other pointers

Where are demos made?

- Largely a West and North European phenomenon, esp. (West) Germany and the Nordic Countries
- East Europe and Russia long behind the iron curtain, more activity after that
- Scarce elsewhere
 - Why? Hackers, otakus, technical reasons

"A typical scener"

- Heavily male-dominant hobby
 - As they've tended to be in general
- Originally teenagers and youngster
 - Later on, growing old not necessarily a youth culture anymore
 - ... and little rotation

Demogroups

- Demos are mostly made by groups
 - 3-5 people participate actively
 - Big and international groups, too
- Names such as: Scoopex, The Physical Crew, Booze Design
- And the Members have handles: Dr. Acid, Slayer, Marq
 - Notation: Broti/Digital Talk ("of")

Roles

- You need at least a:
 - Programmer (coder)
 - Musician
 - Graphician
 - In essence, quite standard roles
- Other duties, too:
 - Leader, organizer, swapper, SysOp, hangaround, mascot etc.

Parties

- An important part of the culture
 - Started as copyparties
 - Networking, competitions, getting wasted
 - Typically yearly events (these days)
- Assembly, Revision, The Gathering, Alternative Party (The Party, Breakpoint)
- Party photos: http://www.slengpung.com/

Parties (2)



Not only demos

- Sceners produce a lot more
 - Images
 - Music
 - Videos
 - Disk magazines, diskmags (esp. 1990s)
 - These days also some games

Diskmags

		The Stalin of the scene	
RUBRICS		Melon Dezign – To be disbanded?	
Welcome to RAW	~000	Poland – The Big Bang	
Editorial	×000 √001	East against west Who do you think is underrated?	
RAW Staff	002	More organization	
How to order RAW	003	Silents DK - Can't stand it anymore	
Newsflash	004	Scene: A bunch of boring bitches!	
Coming Productions	007	Fuck the Anti-Nazi demos!	
Statements	008	Funny or what?	
If you miss a normal mag	009		
SCENE STUFF		REVIEWS	
WOTW - The EuroCharted ripper	010	Demo reviews	
WOTW - Lizard attacks	012	Groups: Introduction	
WOTH - Me?	013	Sanity	
Lemon Can we trust them?	014	Kefrens	
Brainstorm has died	016	Lemon.	
Scott – Nobody gets drunker!	018	Melon Dezign	

MUSIC

PALETTE

COLUMNS

PRESET

• Scene journalism: R.A.W. #6

But is it art?

- Especially in the 1980s nobody thought they were doing "art"
- In the 1990s the art discourse emerges, together with "design demos"
- Recently, in the 2000s, very experimental works at times
- ...so it must be art?

But is it art? (2)

- On the other hand, the works are made for the community itself
 - Some rare demo exhibitions in museums (e.g. Kiasma 2003)
- Some sceners are in the media art circles, but they're a minority
- Own values, technically-oriented, rarely political or activist

A chronology

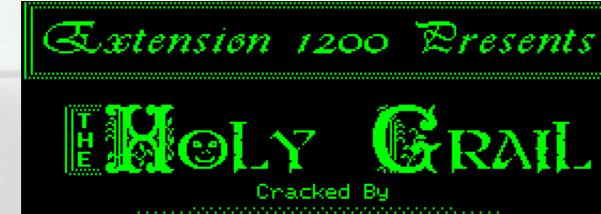
- Next let's look at some productions from the last 30 years
- There are easily more than 100.000, so we can only scratch the surface
- For various platforms, so we'll stick to videos and emulators





• Apple's second computer, 1977

Crack screens



[A Black Bag Production]

Distributed by: The Banshee & Jimmie White:

The Waregird

Crypt of Chaos 213/394-2781 PG V 612/439-1101 Firehouse PW-FIRE 201/852-0831 Strg Tank 714/786-0839

http://artscene.textfiles.com/intros/APPLEII/

Commodore 64



• World's most sold home computer, 1983

Crack intros



BEST TRADE WITH THE

THE ADDICTION BOARD IN U.S.

 Greetings and info screens at the beginning of cracked games

CALL

Crack intros (2)

- Bragging and contacts important
- Ingenious *effect* programming
- The same intro reused multiple times
- Examples:
 - http://www.youtube.com/watch?v=78D9MwLPidw
 - http://www.youtube.com/watch?v=qd3_aYIAZwM
 - https://www.youtube.com/watch?v=SFqBkSJOYO Q

Towards demos

- Right from the beginning intros often made by someone else than the cracker
- Around 1990 an increasing divide
 - Legislation, different user generation, the death of C-64
 - Swappers linked the two trades (pirates and demosceners) for long

Megademos

- Multiple screen collections
- Initially "interactive" (press space)
- In the early1990s the continuous trackmo style
- Examples:
 - https://www.youtube.com/watch?v=99NYfW9D86
 Q
 - http://www.youtube.com/watch?v=hBtd-Fwkacg

Commodore Amiga (1985)



• Amiga 500 (1987) was popular here, too

Peak Amiga

- Amiga-demos emerged already in the mid-1980s
 - A notable competitor was the audiovisually poorer Atari ST (1984)
- Increasing self-awareness, better sound and graphics capabilities
- Commodore bankruptcy in 1994

Amiga demos

- Red Sector Megademo (1989)
 - http://www.youtube.com/watch?v=jcnqcF0b2xw
- Scoopex: Mental Hangover (1990)
 - http://www.youtube.com/watch?v=085cxkahmwY
- Spaceballs: State of the Art (1992)
 - https://www.youtube.com/watch?v=89wq5EoXy-0
- Andromeda: Nexus-7 (1994, AGA)

https://www.youtube.com/watch?v=0Jdi3I3Ep6k

PC generations



• IBM PC, 1981

PC generations (2)

- A huge change in 40 years
- Initially poor sound and graphics capabilities
- Started improving towards the 1990s
 - SoundBlaster, Gravis UltraSound, VGA cards, CPU power
- Finally in the late 1990s affordable 3D accelerators

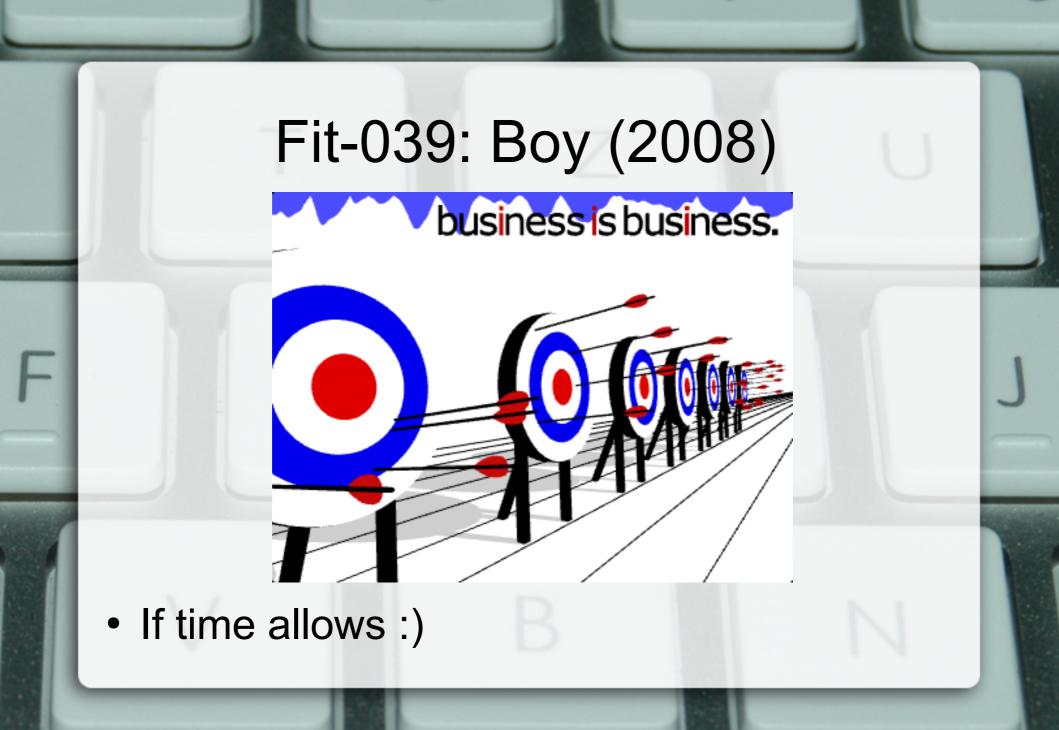
PC demos

- Space Pigs Megademo (1990)
 - https://www.youtube.com/watch?v=a-G1wserP5k
- Complex: Dope (1995)
 - http://www.youtube.com/watch?v=_yJ5M3BY2Ts
- Blasphemy: Moral Hard Candy (1999)
 - http://www.youtube.com/watch?v=OWdoflubBTM
- RGBA: Elevated (2009), 4k-intro

http://www.youtube.com/watch?v=_YWMGuh15nE

Other platforms

- 1980s home computers
 - Sinclair ZX Spectrum, Atari ST, MSX, Amstrad CPC, Oric ...
- Game consoles
- Mobile phones, PDAs
- Macintosh, Atari Falcon, Linux
- Browsers: Flash, JavaScript



Living fossils

- Old demo machines don't necessarily disappear
 - Nostalgia
 - Community
 - "Squeezing the last cycle out" ethics
- Especially the C-64 scene is still active
 - Even here a C-64 demoparty, Zoo

Sceners now

- Many work in various fields of new media
 - Programmers, designers, musicians, researchers, IT specialists
- A pre-school for the game industry?
- You learn useful skills, but...
 - A too easy narrative, incorporation, byproduct

The future of the scene?

- The community is still alive and productive, parties are held frequently
 - Large parties have turned game-centric
- Little rotation of members
- Certain decline in activity
 - Bent Stamnes's statistics (1991-2011)

Preservation challenges

- Machines and storage media don't last forever
 - Archives
 - Emulation
 - Videos: YouTube etc.
 - Migration, re-creation: rare
- Similar questions as in software, game and new media art preservation

Readings

- Tamas Polgar (2005): Freax: The Brief History of the Demoscene
- Anders Carlsson (2009): The Forgotten Pioneers of Creative Hacking and Social Networking
- Markku Reunanen (2010): Computer Demos – What Makes Them Tick?

Readings (2)

- Markku Reunanen (2017): Times of Change in the Demoscene
- Daniel Botz (2011): Kunst, Code und Maschine
- Patryk Wasiak (2012): 'Illegal Guys'
- WiderScreen thematic issue (1–2/2014)

- http://www.widerscreen.fi/

Links

- Pouet.net: http://www.pouet.net/
- CSDb: http://www.csdb.dk/
- Demozoo: http://www.demozoo.org/
- Party pics: http://www.slengpung.com/
- http://en.wikipedia.org/wiki/Demoscene
- https://wiki.aineetonkulttuuriperinto.fi/wiki/D emoscene

