

Preserving and Studying the History of Video Games

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Outline

- Video game history
- Case: videogames.fi
- Finnish game history
- Game preservation
- Further readings

Histories

- Video games and retro are cool
 - Market for not just games but other paraphernalia: books, mugs, t-shirts and so on
- Academic studies
- Amateur histories
- Coffee table books
- Blogs, online stores and so on

Histories (2)

- Following Jaakko Suominen's model:
 - *Enthusiast histories*: chronicles written by insiders, often non-academic.
 - *Emancipations*: alternative accounts providing unorthodox views on history.
 - *Genealogies*: tracing the origins and family trees of games.
 - *Pathologies*: in-depth archaeological analyses of games (not limited to the temporal dimension alone).

Videogames.fi

- <http://www.videogames.fi/>
- A collaboratively updated Wiki site trying to collect information on all commercial Finnish *digital* games
- Mainly updated by Manu Pärssinen, me, Tiia Naskali and Elina Vaahensalo, with contributions from others since 2012
- In spring 2017 there were 800 games, most figures here based on spring 2013 (482 games)

Videogames.fi (2)

- Most games found with Internet searches
- Additions from game companies and individuals
- At times we have contacted the authors
- Collected data:
 - Title, year, platforms, author, publisher, screenshot, genre, format, homepage and extras

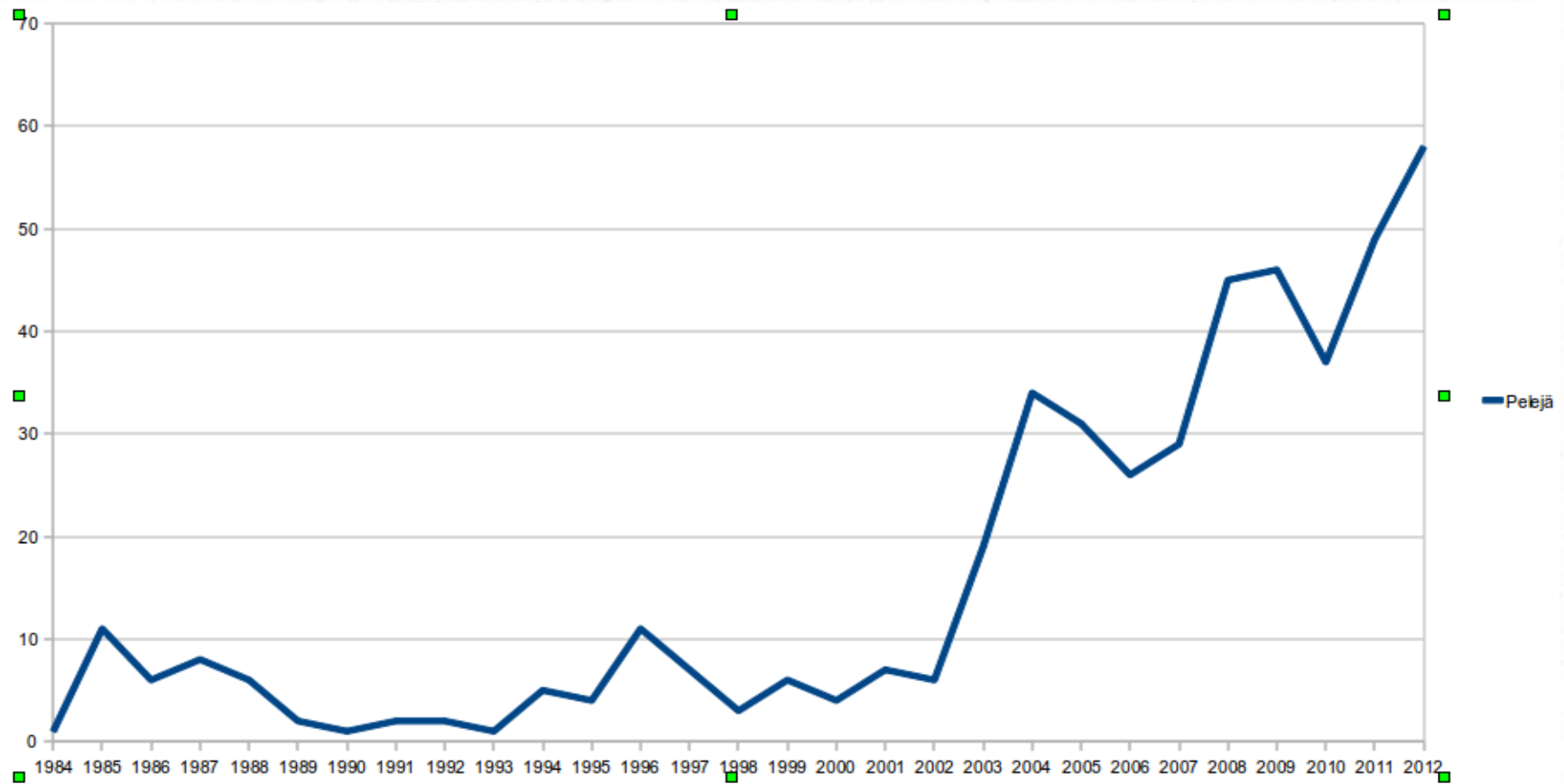
Videogames.fi (3)

- Tricky definitions
 - What *is* a commercial Finnish game?
 - What to do with re-releases, collections and ports?
 - Finnish subcontractors?
 - Teaching games?
 - Shareware?
 - ... and much more

Videogames.fi (4)

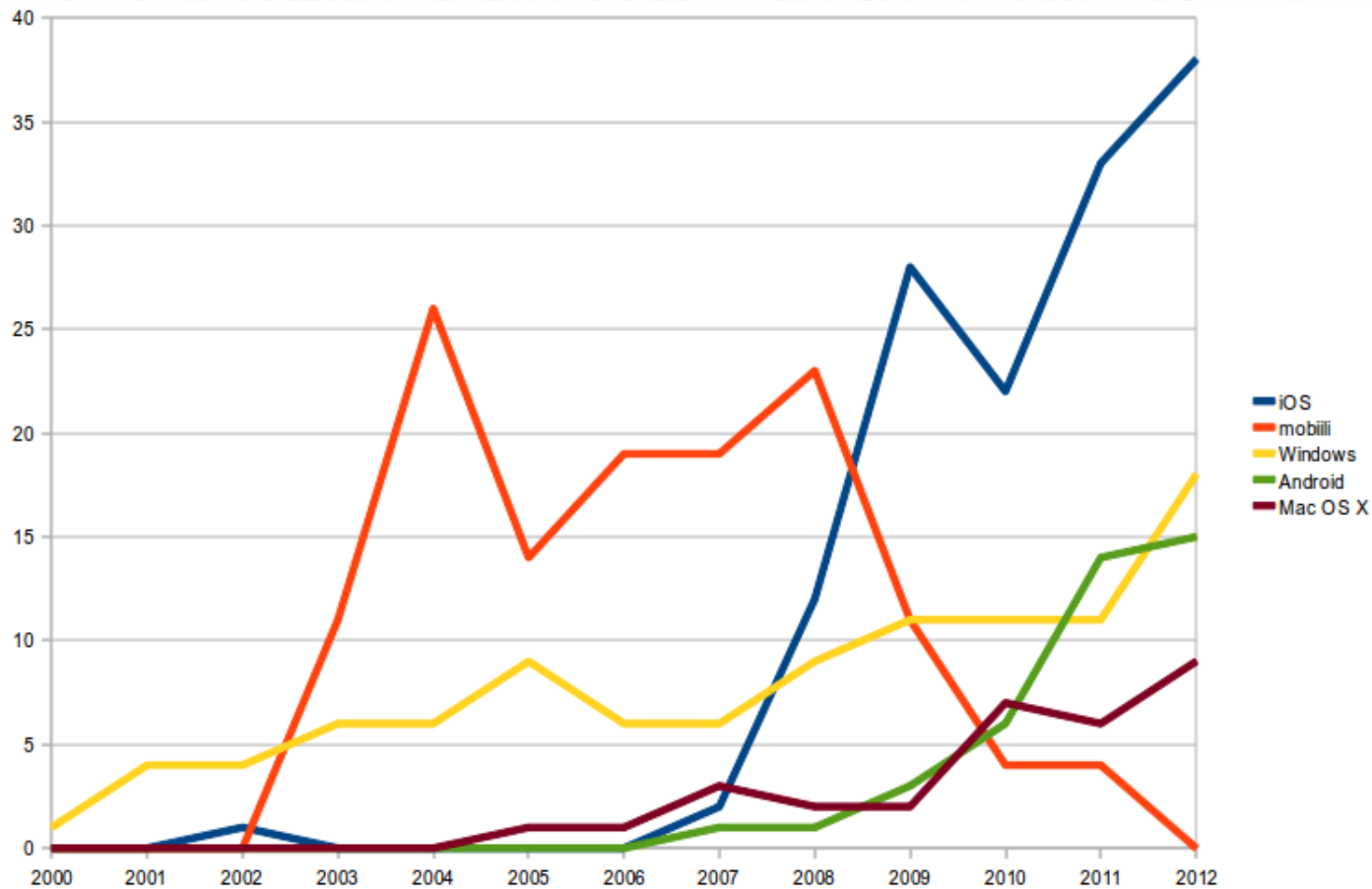
- Videogames.fi not the first of its kind
 - <http://www.suomipelit.fi/>
 - Contains also freeware games
 - Wikipedia's list of Finnish games
 - Individual collectors' pages
- Several similar archives around the world:
 - MobyGames, Lemon Amiga/64, World of Spectrum, Spectrum Game Database ...

The big picture



- Commercial Finnish games 1984–2012

The 2000s



- Commercial Finnish games by platform 2000–

Gaming platforms

Alusta	Pelejä	MSX	11
iOS	140	Playstation 3	11
Mobiili (pääosin Java)	135	Playstation Portable	11
Windows	114	Selainpelit	11
Android	42	Xbox360	10
Mac OS X	32	BlackBerry	9
MS-DOS	30	Linux	9
Commodore 64	25	Gizmondo	8
Symbian (sis. N-Gage)	17	Blueberry	6
Windows Mobile/Phone	17	Meego ja Maemo	6
Amiga	11	Nintendo DS	6

- Finnish games published for different platforms

Game genres

Genre	%	Seikkailu	7,1
Pulmapeli	26,4	Strategia	4,6
Toiminta	22,8	Musiikki	3,6
Räiskintä	12,9	Roolipeli	1,6
Ajopeli	9,8	Simulaattori (pl. ajopelit)	0,7
Urheilu	8,2	Tuntematon/muu	2,3

- Genre distribution of Finnish games (taxonomy based on Jaakko Kemppainen's work)

Some observations

- Small puzzle games the most common type
- The Finnish game industry was very small until 2003, growing ever since
- Mobile Java games appeared and disappeared
- Fading of the initial interest
- Few console games
 - Most notable is the absence of PlayStation, NES, Sega Megadrive, GBA

The Hunt for the First

- Raharuhtinas(1984)
- Or maybe Mehulinja, Yleisurheilu or Herkkusuu (1984)
- Or maybe Chesmac (1979)?
<https://www.youtube.com/watch?v=sMgWpz5V1qg>
- Is it even relevant?

Different periods

- Based on the typology we divided the history roughly into five periods:
 - Pioneers
 - The first game companies
 - To the PC and beyond
 - Mobile games
 - App stores and the indie boom
- Very similar to the Swedish game industry documented by Ulf Sandqvist (2012)

Pioneers (1985–1988)

- The first wave of Finnish games
- Most often made by one programmer
 - Auteur spirit: most notably Jukka Tapanimäki (Octapolis, Netherworld, Moonfall), Stavros Fasoulas (Delta, Sanxion, Quedex)
 - Only the music was typically composed by a separate musician-programmer
- The role of the MikroBitti computer magazine

Pioneers (2)



- Raharuhtinas by Simo Ojaniemi (1984)

Pioneers (3)



- Sanxion by Stavros Fasoulas (1986)

Pioneers (4)



- Early license game: Uuno Turhapuro muuttaa maalle (1986)

Pioneers (5)

- Commodore 64 and MSX computers the most popular platforms
- National small publishers:
 - Amersoft, Teknopiste, Triosoft
 - Same companies also imported and sold games
 - Games in Finnish only
- UK the biggest game industry in Europe already by far. A few Finnish games published by Thalamus, English Software and Hewson.

The first game companies (1993–1996)

- New powerful “16-bit” platforms, such as Commodore Amiga and Atari ST
- And, increasingly, the PC compatibles in the nineties
- Increased need for content production
 - Not doable by one super coder anymore
 - Need for bigger teams with defined tasks

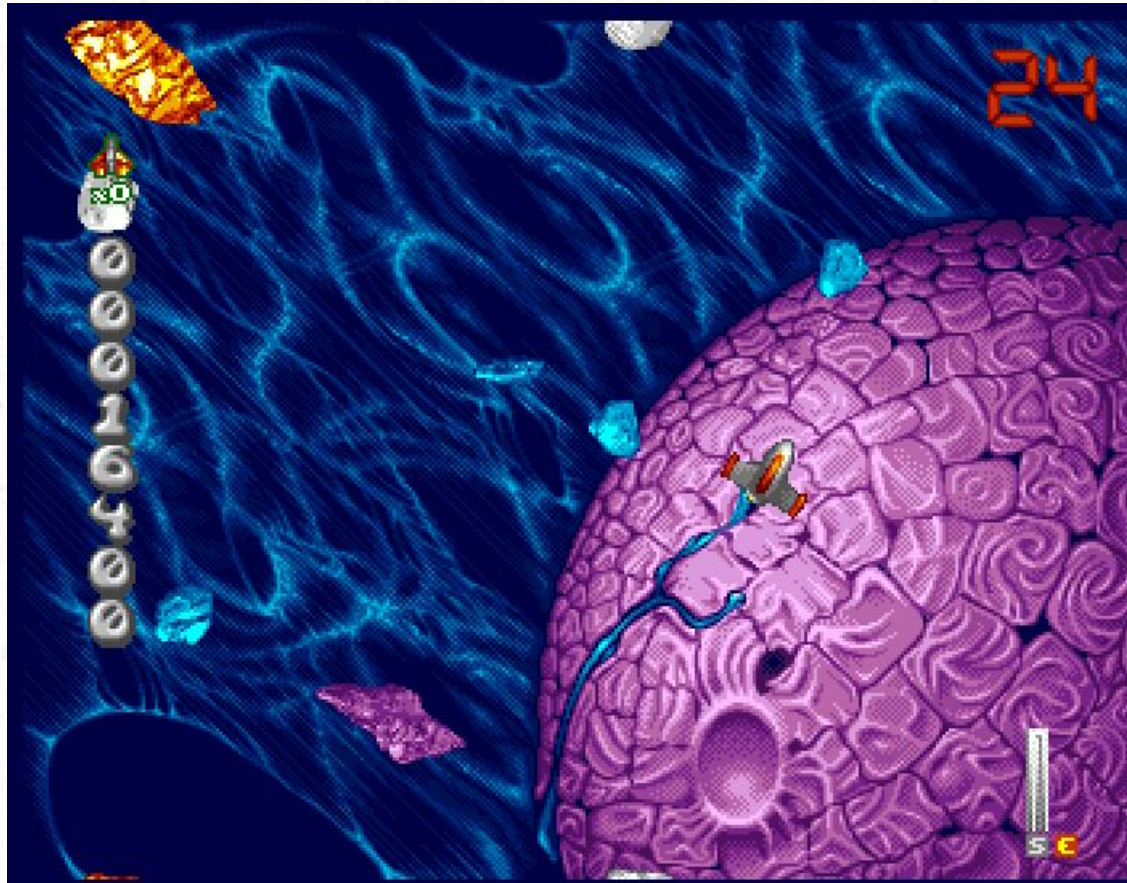
The first game companies (2)

- Some familiar companies part of the 1st wave:
 - Terramarque
 - Bloodhouse
 - Later joined to form *Housemarque*
 - Remedy
- Increased aim for international publishing
 - Not easy to operate with corporations, as Finnish companies were mostly full of inexperienced but skilled youngsters

The first game companies (3)

- The role of the demoscene
 - All 1st and most 2nd wave companies have their roots in the demoscene (sub)culture
 - Involved real-time audiovisuals and programming – quite natural to proceed to games
 - However, can't be considered just a “preschool” of professional game developers
- Housemarque, Remedy, Bugbear, Sumea, Mr. Goodliving, Grand Cru, Riot-E, Fathammer ...

The first game companies (4)



- Stardust by Bloodhouse (1993)

The first game companies (5)



- Elfmania by Terramarque (1994)

The first game companies (6)



- Muukalaisten yö / Alien Incident by Housemarque (1996)

The first game companies (7)

- The Finnish bank crisis and depression of the early 1990s
 - Computer sales went down
 - Not a fruitful situation for risk taking
- The amount of yearly published games still very low, peaking at 10 games in 1996

The first game companies (8)



Vammalalaispojat Mika Keskiikonen (vas.), Jani Peltonen ja Juha Talasmäki tekivät tietokonepelin ja lähtivät myymään sitä Lontooseen kansainvälisille messuille. Harrastuksesta saattaa kasvaa vaikka leipäpuu.

- The need for heroic stories: Jani Peltonen and Juha Talasmäki went to the USA (1995)

To the PC and beyond (2001–2004)

- Commodore went bankrupt in 1994
 - The end of the home computer era
- Starting from the mid-1990s the PC compatibles the most important target for Finnish game companies
 - First MS-DOS and then Windows
- The scale of the productions kept growing
 - Increased need for project management

To the PC and beyond (2)



- Max Payne by Remedy (2001), also a Hollywood movie in 2008

To the PC and beyond (3)



- Rally Trophy by Bugbear (2001), the forefather of the Flatout series (2004–2009)

To the PC and beyond (4)



- Transworld Snowboarding by Housemarque (2002)

To the PC and beyond (5)

- The increasing role of game consoles, gradual shift away from computer games
 - PlayStation (1994)
 - PlayStation 2 (2000)
 - Xbox (2001)
- Finns took a while to react. Max Payne games ported to PS2 and Xbox by foreign companies.
 - Expensive develkits and lack of experience hindered the process

Mobile games (2003–2008)



- Nokia, Nokia, Nokia, Nokia, Nokia, Nokia, ...

Mobile games (2)

- Late 1990s and early 2000s a period of extreme growth in the Finnish mobile industry
- 1990s mobile phones still with monochrome displays and built-in simple games
 - The worm game
- Increase of computational and audiovisual capabilities in the 2000s
 - Color displays, MIDI sounds
 - Mobile Java (J2ME) across multiple devices

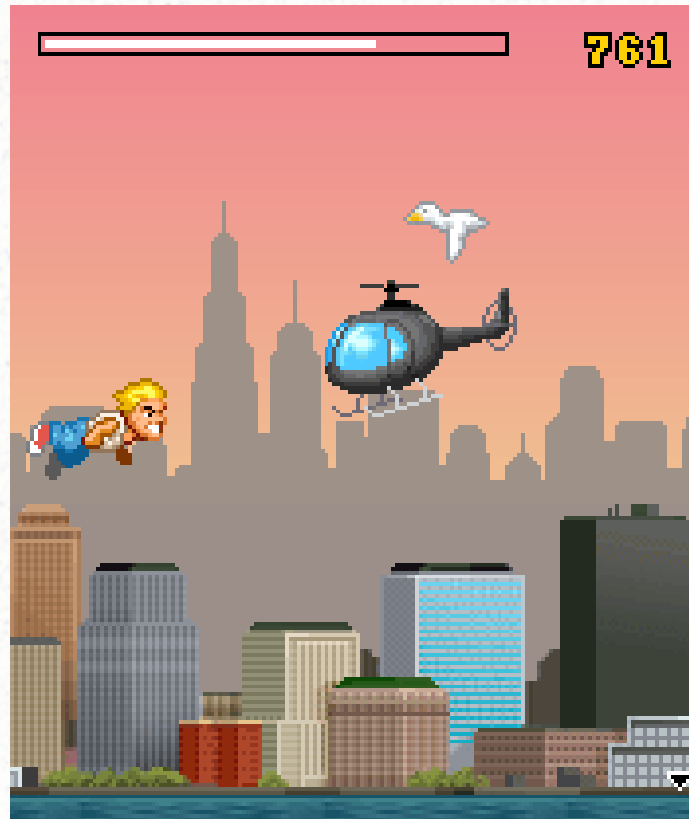
Mobile games (3)

- 3rd party development enabled by downloadable Java games
 - Connection to operator logos, ringtones, background images etc.
 - Games most often sold in the same ads as other mobile content
 - A colorful field with a wide range of devices with different specs (and bugs) – a testing nightmare
- Rapid growth starting from 2003

Mobile games (4)

- Short development cycles
 - As many as 20 games a year
 - Games mostly simple recreations of old classics
 - easy to notice the references to the 1980s games
- Notable companies of the time:
 - Sumea (Digital Chocolate), Mr. Goodliving, Universomo, Fathammer, Rovio
- Three first bought by big American companies

Mobile games (5)



- Johnny Crash by Sumea (2004)

Mobile games (6)



- Lego Star Wars by Universomo (~2006)

Mobile games (7)



- Nokia's N-Gage (2003)

Mobile games (8)

- Badly documented period of Finnish games
 - Hectic publication pace
 - Many of the companies bankrupt
 - Little interest in preservation/documentation from the company side
 - No physical copies of games
 - Contemporary phones unusable or discarded
 - Games available only on warez sites, hazy ownership

Mobile games (9)

- The peak of Finnish license games
 - Big publishers/owners opened doors to well-known franchises
 - All of the mobile game companies created license games at some point
- Notable brands:
 - Star Wars, Ocean's 13, Trivial Pursuit, Indiana Jones, South Park, Lego, 300, Gorillaz, MTV and Ferrari.

App stores and the indie boom (2008–)

- Nokia the leader of the market with its Symbian smartphones in the early 2000s, but:
 - Unimpressive 3rd party development tools
 - Wide variety of devices, need for extensive testing
 - No unified “App Store” for finding games and other software
- N-Gage was turned from a phone into a game platform but didn’t take off

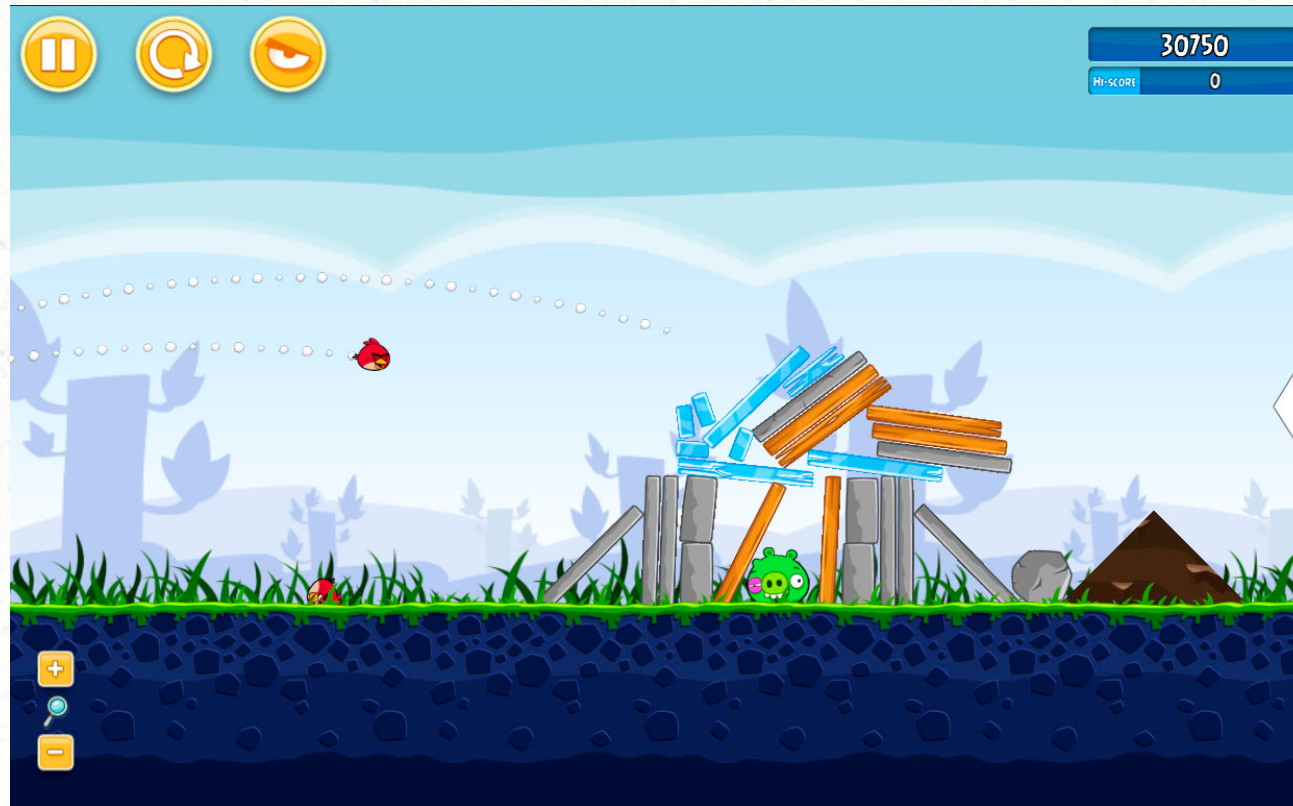
App stores and the indie boom (2)

- Apple's iPhone changed the game (sic) in 2007:
 - Easily accessible development kit
 - Documentation available for developers
 - Unified App Store
 - Single device to target (has changed since)
 - Touch screen
 - iPod halo effect
- Finns reacted quick, games out in 2008 already

App stores and the indie boom (3)

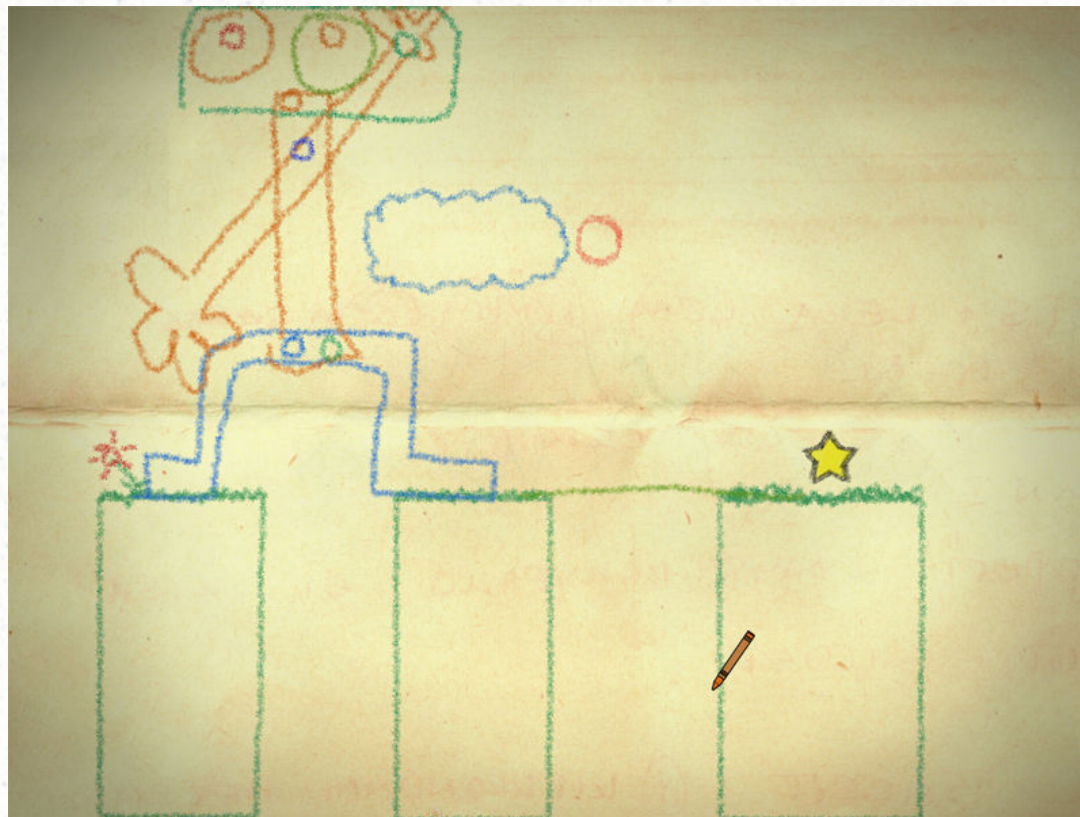
- Not just Apple, concurrent developments in computer and console game distribution:
 - Steam (Valve)
 - Xbox Live Arcade (MS)
 - PlayStation Network (Sony)
- Some implications:
 - Quick time-to-market, no physical product
 - Less need for big international publishers
 - Indie development has soared

App stores and the indie boom (4)



- I guess you know this one (2009)

App stores and the indie boom (5)



- Crayon Physics Deluxe by Klooni Games (2009)

App stores and the indie boom (6)



- Legend of Grimrock by Almost Human (2012)

Observations

- Google replicated Apple's success with its Google Play
- Plenty of competition, need to stand out
 - Thousands of competitors in most genres
 - Humor and novelty seem to do the trick!
- Low prices can only be offset by large volumes

Observations (2)

- Already in 2011 smartphones were the main target for 39% of Finnish game companies
- New business models, most notably *free-to-play*, have changed the field again
- Not all about smartphones: Windows and even Mac games are still important
- Towards multiplatform instead of single-platform
- Aim to establish franchises, not just game series

Finnish Games Now

- The history of Finnish games serves as a cross-section to the history of gaming culture, devices, operating systems among other themes
- The Finnish game industry is now almost exclusively focused on international markets
 - Learning and indie games the only notable exceptions
- Digital distribution affects everything
- Wide range of actors from individuals to companies

Finnish Games Now (2)

- The field grew quickly until around 2018, but just to put things into perspective:
 - Media focuses on a few success stories
 - Video game crash of 1983, The IT bubble: no need to repeat the same mistakes
 - Around 3200 people in Finland earn their living in the game industry (2018) – comparable to a single large company
 - Similar development is underway in several other countries, meaning more competition

Finnish Games Now (3)

- Even the institutions awaken:
 - Game studies offered at multiple universities, polytechnics and vocational schools
 - Regional game clusters
 - Tekes funding through its “Skene: Games Refueled” program (2012–2015)
- And the field founds its institutions:
 - IGDA Finland
 - Suomen pelinkehittäjät ry.

Game Preservation

- Systematic preservation of games and gaming
 - Largely a hobbyist undertaking so far
 - Some initial interest from memory institutions and the academia now
- Plenty of challenges
 - E.g. Mobygames: 290 platforms, about 250,000 games listed

Rotting Media

- ROM cartridges
- Magnetic media
 - Tapes
 - Floppies
- Optical media
 - LaserDisc, DVD, GD, UMD ...
- Archival formats: D64, ADF, TAP ...

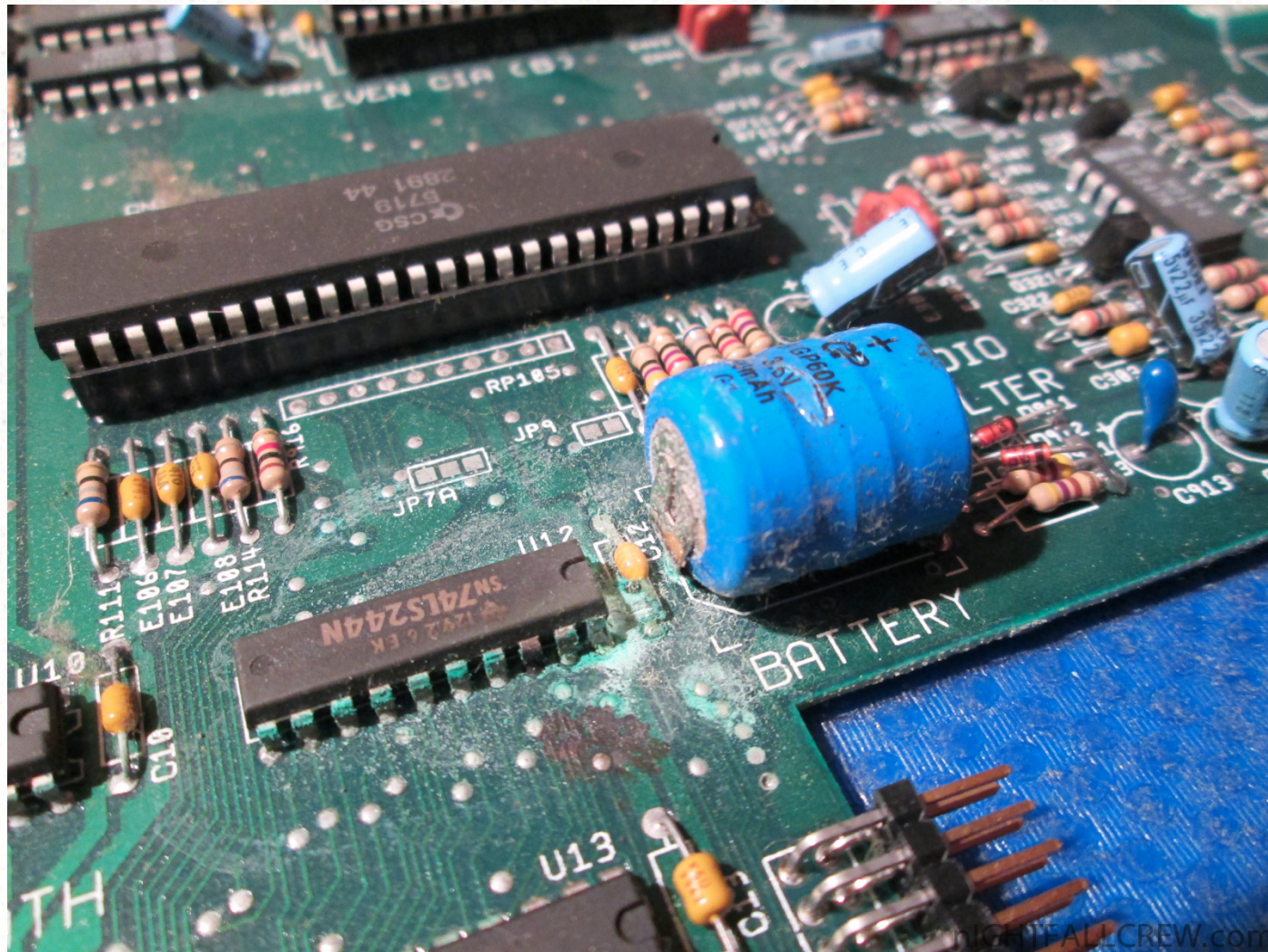
No Media

- Even worse: no physical media
 - Downloadable games
 - Bug fixes – versions
 - Hard drive durability?
- A new massive challenge: online content on servers
 - What happens when *they* pull the plug?

Rotting Hardware

- Chips and components age
 - Most notably capacitors and batteries
 - But also power supplies, transistors and ICs
- Likewise for peripheral devices

Rotting Hardware (2)



Emulators to the Rescue?

- Plenty of good emulators, but:
 - Mostly for popular systems
 - Plenty of abandoned projects, too
 - Completeness, game-specific hacks
 - Not the real deal!
- Game collections, “ROMs” largely illegal
 - Legislation hinders preservation efforts

Industry practices

- Game companies are *companies*
 - Need to make money
 - DRM, piracy
 - Fast cycles of obsolescence
 - Preservation efforts secondary, except in the case of collections and re-releases
- James Newman: *Best Before* (2012)

Finally: What to Preserve?

- Games and related items?
- Hardware?
- Playability?
- Gameplay?
- Let's discuss

Further readings

- Kuorikoski, J. (2014): Sinivalkoinen pelikirja.
- Newman, J. (2012): Best Before.
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