Not "The Space Invaders" but "A Space Invaders", or How you Can Help Save Unique Versions of Atari Games and Software

Maciej Grzeszczuk[1,2][0000−0002−9840−3398] and
Kinga Skorupska[1][0000−0002−9005−0348]

[1] Polish-Japanese Academy of Information Technology
[2] The Foundation for the History of Home Computers
`maciej.grzeszczuk@fhkd.pl`

Keywords: Retrocomputing · Magnetic Media · Digital History · Heritage Preservation

A dozen or so years ago, eight-bit Atari, Commodore or ZX Spectrum, magical toys from the late 1980s, which for many were the first contact with computers, were a thing of the past. Found in the basement or attic, they went to electronic waste or, at best, were auctioned barely above the price of shipping. They were outdated devices, like CRT-TVs or old noisy fridges. Today, 30-year-old computers are part of a retro fashion[3]. Their value has increased several times[4], and people who in their youth dreamed of owning a computer that they had previously used at a friend's house can finally afford it and start their sentimental journey.

However, such a traveler does not often reach for the original media - loading a game from an old cassette is not part of the nostalgia: several minutes of waiting in suspense, with no guarantee of success. In addition, mechanical components require maintenance, belt replacement, or head cleaning and adjustment. It is much easier to use a modern mass storage device simulator, where the image of the program disk or cassette is simply downloaded as a file from the Internet and put on a memory card. And one such card, the size of a fingernail, can hold all the programs that have ever been produced for a given hardware platform[5].

Therefore, while hardware is in a better position - when it ceases to please the original user, there is a chance it will be passed on to a new one or sold - the situation is much worse for the media. Who would care about old, unreliable

---

[3] The 8-bit Guy: `https://www.youtube.com/@The8BitGuy`, Retro Borsuk i Montek!: `https://www.youtube.com/@RetroBorsuk`, Adrian's Digital Basement: `https://www.youtube.com/@adriansdigitalbasement`, IMSAI Guy: `https://www.youtube.com/@IMSAIGuy` or Techmoan: `https://www.youtube.com/@Techmoan`

[4] Kim Key: "The Impractical but Indisputable Rise of Retrocomputing", New York Times: `https://www.nytimes.com/2021/01/08/style/retrocomputing.html`

[5] The 1.3GB collection `http://c64.rulez.org/xlfiles/` contains 12.105 games for Commodore 64, sometimes in several versions.

magnetic tapes when their content has long been digitized and available for free on the Internet. But is it really so?

The games that came to Poland in the 1980s were mostly privately imported, or more precisely, smuggled, from Western European countries and the USA[1]. There, they were advertised on TV, published in boxes, with colorful covers, including multi-page manuals, and gadgets. In Poland, after anti-piracy protection had been removed from the original copy, even the name of the author could be replaced by the ad of the cracker. Such games were later duplicated as one of several titles that made up a collection of games on a hand-described tape. The buyer often did not know what games he was bringing home, and sometimes he made a buying decision based on a cryptic, one-sentence description, like: "A man in a pyramid, collecting diamonds and running away from skulls". More difficult titles, such as Kennedy Approach - an air traffic control simulator - or Silent Service, a great submarine simulator, received a typewritten one-pager of an instruction, with hand-drawn sketches, all barely legible after multiple photocopies. Paid extra.

Figure 1: Original Microprose cassette edition of Sid Meier's Pirates! for Commodore 64, with the 88-page manual, reference sheet, a color map of the Caribbean, and a nice box.

Figure 2: A set of Atari XL/XE games, recorded in 1988 at a pirate stand located in DH Feniks, Warsaw, ul. Żelazna 32. along with a one-page manual for Montezuma's Revenge, which could be purchased separately should the game be too difficult to figure out the gameplay.

Over time, things evolved. Local products appeared, such as modifications to tape recorders, that accelerated the loading of programs[6], or crude but powerful disk drives built from components available on the local market[7]. Magazines printed code listings that were hand-typed into the memory and then tinkered with, as a substitute for programming classes. Games and utilities were written in local computer clubs, by the users for the users. Listener-written programs were distributed in the form of an audio wave on public radio as part of its nighttime "Radiokomputer" broadcasts. Those lucky enough to have a telephone line and modem could begin to exchange thoughts and data with the world before public

---

[6] KSO Turbo 2000: `http://atariki.krap.pl/images/a/a9/KSO_TURBO_2000.pdf`

[7] TOMS 720 disk drive: `http://atariki.krap.pl/index.php/TOMS_720`

Internet access became available. Demoscene communities sprouted, using their computers not only for work or play, but also to create and share art. The digital culture created in this way was recognized by UNESCO on December 15, 2021 and included in the National List of Intangible Cultural Heritage[8].

The original game titles of the era, published in multiple copies by giants of the computer games market have probably been archived and shared online by at least one enthusiast. However, this is not at all certain in the case of unique traces of local history that may be waiting on old magnetic tapes to be discovered in dusty boxes stored in someone's attic or basement. These may contain important pieces of the puzzle that can help recreate unique historical contexts created by local socioeconomic conditions, sometimes very different from the mainstream and the history written by the winners.

So what should you do when, while cleaning an apartment, you come across a dusty cardboard box full of old electronics, tapes, floppy disks, faded printouts, or strange, typewritten books? First of all, do not throw them away. There are more and more museums and foundations you can contact, and those will help you. If it is a family member's collection, there may be data there that are worth digitizing[9] and keeping in family records before the storage media disintegrates with age. If these are just sets of pirated games, the information contained in their loaders may please a historian who conducts his research on the early computing scene. Or maybe you have a copy of the lost Atari XE knock-off of Barbarian in there? Let's find out!

Acknowledgments

References

1. Wasiak, P.: Playing and Copying: Social Practices of Home Computer Users in Poland during the 1980s, pp. 129–150 (01 2014). https://doi.org/10.1007/978-1-4471-5493-8_6

---

[8] Wasiak P., Szałankiewicz Ł., Lichnerowicz A.: "Polska demoscena jako wspólnota", ISBN: 978-83-969945-0-9, `https://kskpd.pl/album2023`

[9] An example of a magnetic cassette digitization guide: `https://fhkd.pl/zgrywanie-kaset/`