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Swiss Video Game History and the Smaky Era: Bootstrapping a Platform Archaeology Study

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Introduction

In this paper, we propose a set of guidelines which can serve to conduct projects combining preservation and analytical tasks concerning a given platform, including its video games, especially at a regional level. As the capabilities of such local platforms influenced how video games were to be designed and developed, we consider that they must be documented and understood when studying regional video games history during eras when local platforms were more frequent. We illustrate our approach with an ongoing research project focused on the heritage of the Swiss computer Smaky (1978–1995) and the video games it welcomed.

Scientific framework

Our process is a blend of four separate research axes.

The *media archaeology* axis is meant to save and document the existing hardware and software of a given platform (McDonough et al., 2010; Huhtamo and Parikka 2011). This concerns the physicality of these objects.

The *platform studies* axis considers how the platform came to exist, how it was maintained, and what eventually brought its exploitation to an end. Here, a platform is studied as a whole through five aspects: the study of its reception, its interface, its form or function, its code, and its architecture (Bogost and Montfort 2007).

The study of *Life courses* focuses on the individuals involved in the platform. Topologically speaking, the history of platforms and video games is made of intersections of life courses.

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Game research uses results from media archaeology and platform studies, blended with game design theories, to focus on video game artefacts, game development, and game design process (Lankoski and Holopainen 2017).

Brief summary after one year of Smaky platform archaeology

Designed in a University, the Smaky (see Figure 1) reached a local but significant audience during the 1980s, in particular through public schools (Kirrman 1989; Nicoud 1991; Cao and Mertens, 2010). Games were developed for the Smaky OS as a hobby, sometimes even distributed at the end of the year to the network of customers. We have indications that these games had an influence on local pupils turning to IT or game development (thanks to the frequent availability of level editors). Some Smaky games found a wider and global audience (Europe, North and South America, Asia) with MS-DOS or Windows versions, allowing a recurring character called “Blupi” (also known as “Toto” and “Egbert”) to be still remembered today, for example via modding.



Figure 1. The Smaky 100 (Photo credit: Rama and Musée Bolo, CC BY-SA 2.0).

A website, smaky.ch, was created around 2002 (and maintained until 2008) with the goal of documenting the history of the Smaky. This non-academic resource gives access to a commented timeline coming with a digital library of scanned booklets documenting the life of the platform a few times a year. This initiative was a good start, that needs itself to be preserved.

Since 2008, the emulator *Smaky Infini* allows everyone to access the OS with pre-installed softwares and games. Here, we found a surprising number of ludo-educative content created by teachers on many subjects, such as german vocabulary or geography, along with educative video games from developers, like *Toto à la campagne* (Roux and Epsitec 1988; see Figure 2).

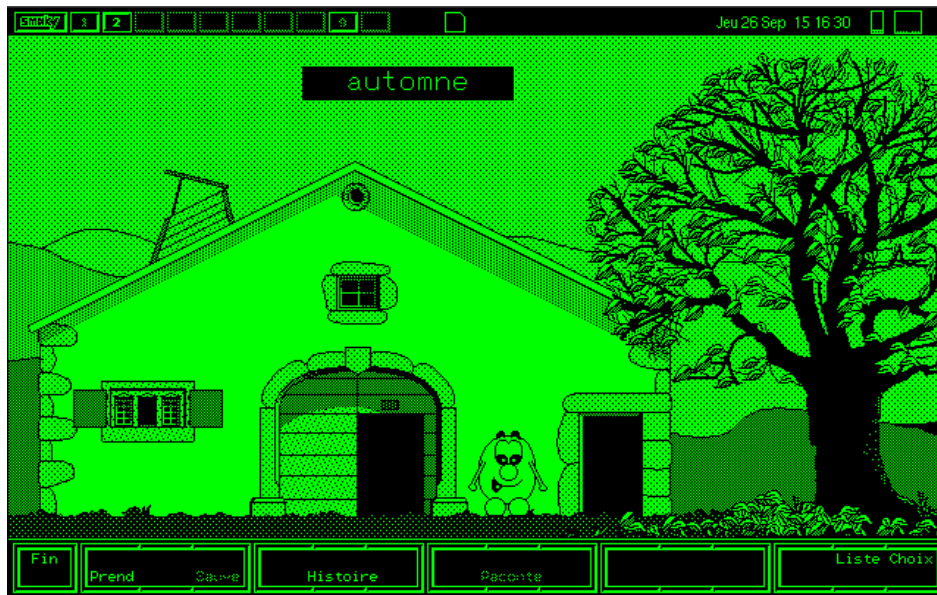


Figure 2. *Toto à la campagne* (Roux and Epsitec 1988).

This year, the organisation of a public roundtable at the start of our project with some of the original actors allowed to document and get their feedback about working on that platform. While some preservation had already been done, the public dimension of the event put pressure on a few actors to dig up and find archives that were thought to be lost. A network of volunteers is now taking part along with us in the preservation of all the documents related to game development on the Smaky.

Guidelines

Bootstrapping such a study may seem gigantic because of the many perspectives to consider and the quantity of material to analyse. We extracted a short set of guidelines inspired by our experience.

Identify what has been done and work with the people already involved

When working on the history of a platform, the starting point should be to identify the available resources in media archaeology (e.g. museums), platform studies and game research (e.g. scholars), and life courses (e.g. game developers, IT experts). If the platform and games had a cultural impact, a community might already be collecting and documenting the material. The work of hobbyists should not be overlooked.

Interview and work with the platforms' creators and their entourage

First, creators may already have shared unreleased or rare materials. Second, they are the living memory of the platform. They have insights about its history and relevant opinions, even if they are unaware of their importance for research. This is especially important for game research as game design processes are seldom encoded anywhere else than in the designer's mind.

Play the video games and find people that played them at the time

In this particular context, playing video games is recommended to analyse them. But their spatio-temporal and cultural context is also important, so it is recommended to interview people that played them at the time to understand how they were practiced and perceived (Stuckey et al. 2013).

Search for the existence of trends between the video games

This is a standard endeavour of platform studies as hardware and software may affect what is easily developed. Trends are very valuable outputs because they can be cross-analysed between platforms to better understand the conditions required for them to exist. Analysis of source code (repetition, style and comments) helps to highlight these trends.

Conclusion

This set of guidelines, based on our experience, has been constructive for this ongoing research project. By publishing them as well as our first steps in this project, we hope to share our insights in a time of global and more specific video game archaeology projects such as Newman (2012), Gazzard (2016) or Nicoll (2019). Our main objective is to spark a discussion about the processes that should be followed in such scientific practice, in a similar way than in design research (Hevner 2007).

Our next step is to put the ludo-educative trend we found in many Smaky video games into context with contemporary platforms such as the Thomson MO5 in France. Our goal will be to understand how and why ludo-educative content was naturally initiated by teachers during the Smaky era as those insights could inform the development of new teaching platforms.

Bibliography

Bogost, I. and Montfort, N. 2007. "New Media as Material Constraint: An Introduction to Platform Studies." In *Electronic Tectonics: Thinking at the Interface. Proceedings of the First International HASTAC Conference*, 176–193.

Cao, H.-A. and Mertens M. 2010. L'innovation au service de l'industrie: le Smaky et la souris. Student Project. Master SHS, EPFL, Lausanne, Switzerland.

Gazzard, A. 2016. *Now the chips are down: The BBC Micro*. Cambridge, MA, USA; London, England: The MIT Press.

Hevner, A. R. 2007. "A Three Cycle View of Design Science Research". *Scandinavian journal of information systems*, 19(2), 4.

Huhtamo, E., & Parikka, J. (Eds.). 2011. *Media archaeology: Approaches, applications, and implications*. University of California Press.

Kirrmann, H. 1989. "The Smaky story: The Swiss personal computer." *IEEE Micro*. 9 (4), 78–79.

Lankoski, P. and Holopainen, J. 2017. *Game Design Research. An Introduction to Theory and Practice*. ETC Press, 2017.

McDonough, J., Olendorf, R., Kirschenbaum, M., Kraus, K., Reside, D., Donahue, R., Phelps, A., Egert, C., Lowood, H. and Rojo, S. 2010. *Preserving Virtual Worlds – Final Report*.

Newman, J. 2012. *Best Before: Videogames, Supersession and Obsolescence*. Routledge.

Nicoll, B. 2019. *Minor Platforms in Videogame History*. Amsterdam University Press.

Nicoud, J.-D. 1991. "Dedicated Tools for Microprocessor Education." *IEEE Micro*, 11 (1), 14–17.

Roux, D. and Epsitec. 1988. *Toto à la campagne*. Smaky. Belmont-sur-Lausanne, Switzerland: Epsitec.

Stuckey, H., Swalwell, M. and Ndalianis, A. 2013. "The Popular Memory Archive: Collecting and Exhibiting Player Culture from the 1980s." In Tatnall A., Blyth T., Johnson R. (eds) *Making the History of Computing Relevant. HC 2013. IFIP Advances in Information and Communication Technology*, 416. Berlin, Heidelberg: Springer.