Mario's legacy and Sonic's heritage: Replays and refunds of console gaming history

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ABSTRACT

In this paper, I study how three major videogame device manufacturers, Microsoft, Sony and Nintendo use gaming history within their popular console products, Microsoft Xbox 360, Sony PS 3 and Nintendo Wii. These enterprises do not only market new game applications and devices but also recycle classic game themes, game characters as well as classic games themselves. Therefore, these corporations are a part of the phenomenon which can be called retrogaming culture or digital retro economy. The paper introduces the different ways in which the corporations began to use history and how they constructed their digital game market strategies to be compatible with the current retrogaming trend. In addition, the paper introduces a model for different phases of uses of history. The paper is empirically based on literary reviews, recreational computing magazine articles, company websites and other online sources and participatory observation of retrogaming applications and product analyses. Sociological and cultural studies on nostalgia as well as history culture form the theoretical framework of the study.

Keywords

retrogaming, classic games, history management, uses of history, consoles

INTRODUCTION

When a game company utilizes its older products to make a new application, when the same company mentions the year it was established in a job advertisement or when it celebrates a game figure's 20-year anniversary, the company *uses history*. The use of history can be a discursive act, which underlines continuity and in so doing, for example, the trustworthiness and stability of the firm. Those discursive strategies also remind the public about previous accomplishments and construct success stories related to celebrated "product classics". However, practical use of history can manifested itself in product manufacturing, business development and management practices. Jerome de Groot (2008, 2) argues, that since "the early 1990s, 'History' and genres of the 'historical' have grown exponentially as cultural artefact, discourse, product and focus."

Ideas and theories of cultures and uses of history have been developed mainly in Germany and the Nordic countries since the 1980s even though these theorizations are based on much older historiographical traditions (see e. g. Koselleck 1985; Sivula 2010).

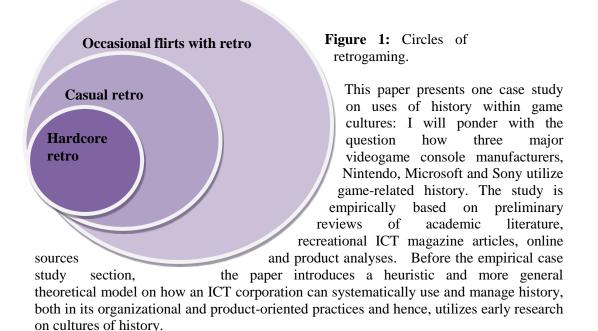
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A Swedish historian Peter Aronsson (2005, 13) characterizes the *cultures of history* (historiekultur in Swedish) as sources, artefacts, rituals and habits which provide obvious ways to form links between the past, the present and the future. With the concept of the *uses of history* or practicing history (historiebruk) Aronsson refers to such processes where elements of the cultures of history are activated to form particular meaningful practice-oriented entities. The uses of history create meaning, legitimize and 'handle' change. The *consciousness of history* (historiemedvetande) is one's conception of the nexus between the past, the present and the future. Therefore, in the use or practice of history the cultures of history are stages through which historical consciousness is formed (Aronsson 2005).

Theories of uses of history have rarely been applied to information technology or digital game issues. Usually they reflect questions of political history or historical museum representations of national cultures and thus, underline history politics (political and societal uses of history) not the cultures of history (see e.g. Grönholm 2010; Kalela 2010). However, there are many topics in information technology and digital games where history cultural theories could be used as analytical devices. It is not only a question of doing research on political historical representations in videogames (uses of folklore or historical events as themes of videogames) but also about how the "internal history" of videogame cultures themselves are represented and used within digital game cultures (Suominen 2009. See also Whalen & Taylor 2008). Even though game companies, game journalists and players look at the future, they also represent, revisit and rethink their own and game communities' earlier experiences. For them, Super Mario Bros. (Nintendo, 1985), Pac-Man (Namco, 1980) or Street Fighter 2 (Capcom, 1991), might be an object of nostalgia and part of cultural heritage, which indeed does not consist only of national eposes, historical sites, monuments of war and so forth. The knowledge of these "game classics" ¹ is mediated from one user generation to another. Hence, retrogaming represents constantly growing everyday use of history, that is, "revisits" and "replays" of history.

Retrogaming is recognized as one general tendency of digital gaming among other trends, such as online, mobile, party and casual gaming (Newman 2004; Whalen & Taylor 2008; Heinonen & Reunanen 2009). Retrogaming refers to a practice of playing and collecting original (classic) videogames of the 1970s, the 1980s and the early 1990s, or using emulators for playing them. Also, retrogaming can be defined as a more general cultural form; it consists not only of gaming but includes other activities, such as the production of large stock of consumer products, textiles, accessories, game related music videos, literature, various artistic, museum and academic practice as well as online circulation of games oriented information and discussion (Suominen 2008). Hence, retrogaming does not consist of only player's or consumers' point of view, but it is also a question of the following aspects: aesthetic expression, experiential arts and research, institutional game preservation, discourse of taste and cultural industry motivated by game companies and producers of side products. It includes circles of more marginal and enthusiast subculture of hard core retrogamers but also many different forms of more casual and occasional "flirts" with old videogames, consumer products in easier non-original packages and formations.



ELEMENTS OF USES OF HISTORY

For this paper, I have elaborated a heuristic model of uses of history which is specifically applicable for ICT corporations. The model derives from earlier classifications of cultures of history (see e. g. Aronsson 2005; Salmi 2001). I have divided uses of history in three sections based on how *conscious and systematic* the organization is in uses of history. In practise, the division is only suggestive, and I do not expect either that many organizations can be placed in the most advanced category.² Moreover, one has to realise that uses of history, or recognition of historicity, always changes "the original". The result is, for example, a transmutation (Thompson et al. 2009, 1) or a reconfiguration (Whalen & Taylor 2008, 3).

Awarness of Historicity	Uses of History	Management of History
Awarness that the	Using and representing	Conscious and strategic
company has a history	history but not necessary	use of history with a
and it has certain	with a special plan	specific division, direction
importances		and goals. Layers:
Layers: Internal history of		organization oriented
the corporation, history of		management, product
the industry, general		based management
histories		

Table 1: Different Forms of Uses of (game cultural) History.

I call the first phase or stage to *awareness of historicity*. It means that the organization and its actors have some sort of conception of meaning of history for the enterprise. This awareness can consist of one or several of the following layers: internal history of the firm, history of the industry and "general histories". Internal history (or histories) refers to the knowledge and conceptions of the foundations and periods in the firm's history as well as those of its key people, products, customers and turning points. History of

industry includes in this case, for example, the formation of ICT and gaming branches, trends, competitors, users and product categories. With general histories, I mean wider political, social, economic, and cultural factors and context which has been related to activities of the firm (How Nintendo shifted production from game cards towards digital gaming or how Sony and Microsoft started to include digital entertainment in their products). The awareness is more implicit; some kind of private matter, but it affects the corporation's activities in everyday operations relatively imprecisely. Typically, it is a collection of individual people's conception or awareness of their own career and their corporations' phases and relationships with other actors.

Usually the awareness starts to emerge – or to become more clearly and often individually and even collectively articulated – when the corporation or a person has had a longer career. I would argue that it is implicitly present already in the beginning of an individual career or at the birth of a firm, but in many cases an individual or a corporation does not recognize the value of history – which can be fatal not only for historical research later on – but also for the continuity of the firm and its learning and evolution process. New media and the creation of older new media technologies provide fine examples about how in the making of new, the preserving of history is not deemed important. There has also been a lack of official institutions and preservation techniques. The similar experiences can be noted about the history of cinema, television and the Internet (Mäkelä & Suominen 2011).³

The awareness of history can lead to a situation where corporation seeks to use explicitly the above mentioned layers (internal corporation history, history of industry, general histories) and their elements in its operations. The utilization of history can be linked for example to individual anniversaries of firm, staff or products, but it does not require a long-term strategy. The *use of history* can be articulated in a single festivity presentation, anniversary products, writings of company histories and so forth. They crystallize or condensate memory, and according to Pierre Nora (1997), these material, symbolic and functional acts create an illusion of recollection and continuity because there no longer exists a spontaneous recollection (see also Ripatti 2011, 20).



Figure 2: Pac-Man 30th Anniversary Notebooks by Moleskine 2010. Photo Jaakko Suominen 2012.

This practice can be termed *management of history* in cases in which the utilization of history has become a permanent, target-oriented and systematic component of company strategy. The corporation could have divided the management of history into sub-categories and sections with particular persons in charge.⁴

The management of history can be separated into two different categories: *organization oriented* history management and *product based* history management. This division is particularly applicable in ICT-industry cases. The organization oriented history management consists of at least six sub-sections where the main aim is to maintain and enrich internal corporate knowledge. Few sections are public and related to legislation while others are private in nature.

The creation of museum collections, document archives and statistical reviews as well as public presentations of company artefacts are quite obvious parts of management of organizational history. It also consists of ways of explicate tacit knowledge and transferring of company culture to new personnel using for example mentoring or making of company handbooks.⁵ Among other things, this category consists of historical studies, other representations of company history (mentioned also when discussing about awareness of history) the organization separate funding and foundations which support company and industry-related academic research.

The other main category of management of history relates to consumer products. Within ICT industry this contains, for instance, version management of software products, updating, service and maintenance, handling of compatibility issues of hardware and software etc. All the time, the firm has to revalue the balance between new and old products. The product related history management is connected to the concept of *planned revification*, introduced by a sociologist Fred Davis (1979, 132–138). Planned revification is an antonym for planned obsolescence, the manufacture of products that breaks easily. Planned revification is a strategy for expanding product life-cycle and for reinvigorating a particular product for consumption once or several times.

Company history and cultural heritage of the company can be utilized in new products, in product marketing and within other marketing issues such as recruitment (Grahn 2012). The company can, for example, underline systematically its long history and therefore its well-constructed know-how, stability and reliability. This can be observed in the car industry but also in the ICT sector particularly in cases of long-standing companies, such as IBM.

Furthermore, an external phenomenon can launch some sort of awareness or even management of history. For example, for Nintendo, the great videogame console crash in the USA, "The Atari shock" in 1982–1983, affected the way in which Nintendo developed its own home videogame console and introduced new quality control mechanisms for its game products in the mid-1980s. According to Akihiro Saito (2011), the Atari Shock still affects the way how Nintendo considers product control and new game markets such as online gaming and social media gaming.

In addition, corporations can actively build retroproducts or *retrolutional products* which are hybrids of traditional values and novel technological innovations.⁶ This can stand for utilization of well-known design conventions (also in design of software products) and in product materials. In this paper's context, utilization of retrospective elements can be seen in those practises, which are related to republications and remakes of old, sometimes

classic videogame products and their online distribution. One can even see some sort of retrolutionar in Nintendo Wii's controller, which still consists of Nintendo's user interface key trademarks: a cross pad and A and B button.⁷



Figure 3: Nintendo experimented with different user interfaces before stabilizing it with a cross pad like in Donkey Konkey double screen Game and Watch handheld device and Famicom home console in the early 1980s. Photo Jaakko Suominen 2011.



Figure 4: Wiimotes, here decorated with Hello Kitty skins, includes also a cross pad. Photo Jaakko Suominen 2012.

In the following section, I will focus on this issue by introducing three key videogame console manufactures and their practices as well as some potentialities within management of (digital game) history.⁸

A CASE STUDY: COMPARISON BETWEEN SONY, NINTENDO AND MICROSOFT

Playing of videogame console games is a part of the game cultural mosaic, which consists also of PC-gaming, online gaming, mobile game applications and arcade gaming. Console games' market value is however, significant and, for example in Finland, it has increased in the last few years comparing to markets of PC games.⁹

Three major manufacturers Sony, Nintendo and Microsoft control global markets of console game devices, and they produce some parts of the game software, even though third-party developers have a substantial role in game development. The current dominating videogame consoles, Sony Playstation 3, Microsoft Xbox360 and Nintendo Wii are the first console devices in which online gaming and online distribution of game products are closely linked. Other devices, such as mobile consoles Nintendo DSi and Sony PSP and their successors Nintendo 3DS and Sony PS Vita are increasingly dependent on online contents and delivery. The top three manufacturers sell game products in their online stores, and important part of virtually distributed products have been somehow retrogaming oriented: old games, sequels of long-term game series or clones of classic digital games. However, all three have different product strategies dependent on their unique company histories.

Company histories shortly: Nintendo

Nintendo was founded in Kyoto, Japan in 1889. The company focused on game card manufacturing already in its early phases and expanded to the digital gaming in the late 1970s. During recent decades Nintendo has produced several popular gaming devices, including Game&Watch handheld devices (1980–), 8-bit NES (Nintendo Entertainment System) videogame console (introduced in Japan in 1983 with the name Famicom, Family Computer) and Gameboy handheld consoles (On history of Nintendo, see e. g. Gorges & Yamazaki 2009; 2010). The Nintendo Wii console (2007) gained special popularity due to its innovative Wiimote controller, even though the machine is not that efficient, multi-functioning or good in Internet connectivity comparing to its rivals Microsoft Xbox360 and Sony PS3.

Games and game characters have also contributed Nintendo's popularity. *Donkey Kong* and especially *Super Mario Bros.* have become game cultural and retro cultural icons. I would argue that retrogame culture and economy are heavily anchored to several key characters. In addition to *Mario* and *Donkey Kong*, these icons consist of Sega's *Sonic the Hedgehog* (1991)¹⁰, Namco's *Pac-Man* (1980) and Taito's *Space Invaders* (1978). Moreover, game characters and several home computers (e. g. C-64) and probably even an 8-bit pixel itself, are portrayed not only in games but also in textiles, accessories, collectibles, music videos, online material, movies, game related graphics and in artworks have become cultural icons (About accessory products in retrogaming see Suominen 2008). In 2009, *Mario* was the second most recognized game character among US consumers after *Pac-Man* (Anderson 2009) Together these icons form some sort of a *game cultural iconostasis*, which has many global, sub-cultural and national elements (On national variations of game cultures, see Saarikoski & Suominen 2009).

Nintendo differs from its contestants due to the fact that its biggest game hits are the company's own products and the company develops products with some sort of Marioled strategy, even though also third party game developers make games for Nintendo devices. Nintendo's most popular repertoire consists of games such as *Super Mario Bros*. (1985), *Mario Kart* (1992), *Super Mario Galaxy* (2007) – as well as games of another popular long term game series, the *Legend of Zelda* (1986). This suits well with the more general cultural industrial logic where corporations aim to secure their success and profit by creating products which have already been popular. Nintendo inflicts high licence fees on third party game developers for every game product that they sell. (Kerr 2006, 46, 57.)

The games are played by new gaming generations but also by old ones because people are used to "the Mario world" and its familiar elements. Playing *Mario* games is a sign of history cultural routinization and habituation process, which can be analysed with the help of cultural historical theories. The knowledge about *Mario* is passed from the old player generation to the new one.

Cultural historian Hannu Salmi (2001) distinguishes five ways in which the past manifest itself in the present. The past appears as memory, experience, customs, artefacts and commodities. As for the cultures of history within the games, the past is present in a person's own memories of playing, and, among other things, in the collective memory represented in the Internet and online discussion forums. The experience of the history of culture is present when we play both familiar and new games, such as *Mario* sequels: we take advantage of our earlier gaming experiences in new gaming situations, because we have learned to recognize the logic, rules, plots and actions associated with the games as well as material user interfaces for games (e.g. the Nintendo cross-pad). Our earlier gaming experiences have taught us to act in a certain way when playing. On the other hand, our earlier experiences have an impact on how we return to familiar games or how we choose new games. We also can teach our friends and family members to choose similar gaming practises. At this point we can already talk about the customs of the cultures of history in gaming. The customs include the following aspects: conventionalized habits and routines of playing either alone or together; the tendency to return over and over again to old games (especially computer games from the 1980s); purchase of familiar games for dominating gaming devices such as Sony PS3, Nintendo Wii or Microsoft Xbox360 (see also Whalen & Taylor 2008, 2-3). The artefacts connected with the cultural history of games are, for instance, the famous and somehow special game devices and games such as the first coin-up games or home consoles, now presented in museums and private collections.¹¹ The line between the artefacts and commodities becomes less clear when old devices and game software are bought and sold at Internet auction sites.(See also Suominen 2008.) In addition, it seems that due to Nintendo's long tradition in gaming industry and its active use of its history, it is easier to find academic research and more popular historical studies about it than about its rivals, even though Nintendo has not published any official company history.

My preliminary studies in late 2011 suggest that Nintendo's historical awareness strengthened in the early 2000s on account of academic and popular interest towards the company's history and its products. 20th Anniversary exhibition (Level X) of Nintendo Famicom console in 2003–2004 at the Tokyo Metropolitan Museum of Photography (see e.g. http://www.chrismcovell.com/levelx.html) was a turning point which showed that popularity of retrogame products could be at least utilized as a "long-tail" in creating more substantial game catalogues for new gaming devices. The first Nintendo's popular home video console, Famicom (Family computer, 1983), seems to be, by side of *Super*

Mario Bros. and *Donkey Kong* (1981), a member of Nintendo's retro game iconostasis in Japan, even though in the international context, maybe Nintendo Gameboy hand held console (1989) is more recognized. In Japan, Famicom has catalyse in Japan, the introduction of popular retrogaming TV show, called *Game Center CX* and printed catalogues of old classic videogames. Furthermore, it appears that fan-based creation of game lists and production of side materials strengthen Nintendo's products' position as part of popular imagery, collective generational experience, more marginal collectibles and cult favourites, which can be found, for example, in retrogame related shops.



Figure 5: Famicom game modules in a retrogaming shop in Osaka. Photo Jaakko Suominen 2011.

Sony

The Sony company name comes from Latin *sonus* and from American Sonny, which signifies a boy. The multi-corporation was established in Japan after the Second World War and its first successful products were transistor radios in the 1950s. Later on, Sony became popular in the consumer electronics sector, with the introduction in 1978 of one of the company's most famous products the Walkman portable cassette player. During the last few decades, Sony has gone through substantial growth and expanded also to the film and music industries. Sony has utilized its own brand history by re-introducing the Walkman concept in Sony-Ericsson mobile phones and MP3-players.

Sony started to operate in videogaming in the middle of the 1980s when it begun a joint venture with Nintendo with the view to developing a CD-ROM system suitable for videogame consoles. Later on, this cooperation ended without any particular success, but Sony introduced its own PlayStation videogame console in 1994. The console appeared to be a great success partially due to the fact that Sony favoured third-party game developers who could utilize relatively inexpensive CD-ROM system instead of using

game cartridges.¹² Therefore, Sony's game selection became large. The next generation console, Sony PS2, was introduced in 2001 and got wide popularity not only because of its game-related qualities but also because many customers used the console as their first DVD-player. The new consoles started to become home entertainment multi-purpose machines, an approach, which seems to be quite typical in Sony's technological strategy.

Partially, Sony uses the history early game developers, such as Japanese Taito and Namco because their early products and their remakes are available for PS consoles. On the other hand, Sony's products themselves are on their way of becoming retro when more time passes from the release of PS consoles.



Figure 6: Used Sony PSP games in Den Den Town area, Osaka, 2011. Photo by Jaakko Suominen

A Japanese game designer and researcher, Professor Akihiro Saito (2011) points out that the difference between Sony and Nintendo in part attributable to their location: Sony headquarters are in Tokyo and Nintendo's in the old historical capital, Kyoto. According to Saito, Nintendo is not only using its company and videogame history, but bounds itself to Japanese cultural tradition and as it emphasizes Japanese values of simplicity and ubiquitous but tacit assistance (and control) of players in its products. Conversely, Sony is more experimental because the company tends to combine different technologies and uses more open game development strategies. According to Saito, the other difference between Sony and Nintendo is in the company profile: Sony is a technology corporation, whereas Nintendo is a toy company.

Microsoft

In 1975, Bill Gates and Paul Allen established Microsoft and started the company's career by designing a BASIC interpreter for the Altair home computer. In the early 1980s, Microsoft began to gain more success and popularity with its Microsoft DOS operating

system for IBM PC computers and later on with Windows operating systems as well as with office software, such as Microsoft Word and Excel. It looks that Microsoft's active use of history can be noticed most clearly in the practices which deal with software compatibilities with older product versions.

Microsoft's company strategy has been to buy software products manufactured by other companies and develop them further. Microsoft used this strategy also when it purchased the rights of Sublogic's *Flight Simulator* game (1982) which was one of the best-known PC games in the 1980s. The game was also used as a device for testing compatibility of PC clone computers. In addition to Flight Simulator, Windows Solitaire (developed by Wes Cherry and included in Windows 3.0 in 1990) and Minesweeper (firstly made by Robert Donner in 1989, released in Windows entertainment pack in 1990 and included in Windows since 3.1. version in 1992) are probably the most well-known Microsoft-related games. For example in Finland, Windows *Solitaire* is the most played digital game (Karvinen & Mäyrä 2011, 3).

First Microsoft Xbox console was introduced in 2001 and its follow-up Xbox360 in December 2005. Just like its rivals, Microsoft itself produces some games and owns game developer firms. Albeit the lack of big game history icons such as *Mario*, the long-term *Flight Simulator* game series as well as *Solitaire* and *Minesweeper* are fine examples of potentialities of the use of game history. Microsoft and Sony produce massive online role playing games and can "borrow" other histories as well as represent its PC connections by utilizing older PC game products and their remakes in console environment. Also it appears that Microsoft, as an American company, lends also heavily from American arcade and home videogame producers such as Atari, Mattel and ColecoVision, but it also uses Japanese retro game products in its online game environments for Xbox360.

ANALYSIS OF RETRO RELATED ONLINE PRODUCTS

As mentioned above, all three major videogame console manufacturers promote so-called downloadable games in their online stores. Furthermore, the computer press has notified these games, and for example *MikroBitti*, the biggest Finnish magazine in recreational computing has published short reviews of loadable games since late 2008. *Mikrobitti* reviews not only downloadable games of Xbox360, Nintendo Wii and Sony PS 3 but also games for handheld consoles (Nintendo DSi and Sony PSP), PC as well as lately iPad and mobile phones, particularly games of Apple iPhone and Android phones.

I will present some brief and preliminary notions about different downloadable retro game strategies based on the analysis of websites as well as reviews of *MikroBitti* magazine. Nintendo does not only recycle its familiar game characters like *Mario* and (and originally Sega's) *Sonic* (see endnote 10) but it also bases its strategy most extensively to videogame history in its product catalogue. Nintendo's online store has two specific sections: Wiiware focuses on new games (that can however, be based on familiar game series or be some sort of clones of earlier game classics) and Virtual Console on classic and retrogames (See also Whalen & Taylor 2008, 3). In its marketing rhetoric, Nintendo refers in its website to history and success of Famicom/NES console: "It was more than 20 years ago when the Nintendo Entertainment System (NES) console was introduced. After that, there have been several different game devices and dozens of games which have sunk into oblivion. Wii resurrects these games in its Virtual Console consists of games of the following old consoles and home computers: NES, SNES (Super Nintendo Entertainment System), Nintendo 64, Turbografx (PC Engine), Sega Mega

Drive, Neogeo, Commodore 64 and Sega Master System. Nintendo does not only utilize its own classic products but also those of its former competitors which have closed their operation with game consoles, such as Sega.¹³ On 28 July 2010, there were over 360 classic games in the Finnish online store and on 28 December 2011 there were 379 games Finnish version Nintendo Virtual sale in the of Console on (http://www.nintendo.fi/wii/ladattavat/haku/pelityyppi_kaikki/ikaraja_0/kategoria_virtual console/#bottom.)

Microsoft's and Sony's game history is slender and more translucent than Nintendo's, and one could not necessary even recognize their games as retrogames or classics because their games have not been iconized like Nintendo's games and developed mostly by third party developers. One other presumptive hypotheses is that online stores, which probably have emerged with retro-oriented selection, will develop more towards new games when third party game developers have had more time to launch new innovative products. This can be revealed, for example, by analysing game reviews. On the other hand, Nintendo has increasingly linked old classic game products in its selection, and there seems to be market for that; it is not only a question of lack of novelties.

Microsoft has several retro game products in its virtual shop and the Microsoft Live Arcade service. One can see, for example, a selection of classic games and game series made for PC environment before Xbox, such as *Prince of Persia* (Brøderbund 1989), *Worms* (Team 17, 1994), *Doom* (id Software, 1993) and *Monkey Island* (LucasArts, 1990). Likewise, there are some older Japanese and American arcade and console games like *Space Invaders* (Taito, 1978), *Centipede* (Atari, 1980), *Arkanoid* (Taito, 1986) and *Pac-Man* (Namco, 1980). In the summer of 2010, there were about 300 games in online stores, and Microsoft advertised its service with the following slogan: "First class games from updated retroclassics to the newest hits". (Translated by JS) There was also a live version of popular board game, *Carcassonne* (*Hans im Glück*, 2000), and one could ponder, how one could separate definitions of retro, classic, vintage and perhaps heritage games from each other realizing the fact that chess, for instance, or its digital versions are not retrogames but more like classic(al) games. (On difference of definitions, see also Suominen 2012, forthcoming).

In early August 2011, I conducted online ethnography and content analysis on the Microsoft Live Arcade service and on its special retrogame related application, the *Game Room*, which is a virtual environment where customers can test classic, mostly arcade games and decorate their own game rooms with his or her favourite games. Full versions of the games and decoration cost some money. Players can also read short descriptions of the games. Even though the Game Room game introductions are shorter they resemble those appearing in retrogaming Internet sites and game history books. I selected games and played mostly their free versions (dozens of games). Furthermore, I counted the amount of games published in the Game Room and in Live Arcade's "Classics" game genre by the original publication year.

Live Arcade classic games consisted on 6 April 2011 of 74 different game publications (80 on 28 December 2011) from the years 1980–2009. There were more games published in the 1980s (37 titles) than the 1990s (26 titles) or 2000s (11 titles). The newest publication was an HD version of a game, published originally in 2001 (*Serious Sam* (Croteam/Gathering of Developers)). There were also some other HD republications of older games. Those classic games were originally released, for example, for PCs or consoles such as Neogeo, Genesis, Turbografx (PC Engine) – and surprisingly – for

Nintendo 64. There were also re-releases of arcade games, and it seems that the first rereleasings in Live Arcade were older titles, although there were also newer ones. I also noticed a strong emphasis on game series and some sort of dominance of Japanese games.

At the same time, the Game Room consisted of 188 games from 1977–1991. The majority of them were published before the first videogame console crash (1982–1983): 23 titles published originally in 1977–1979; 116 titles in 1980–1983; 33 in 1984–1987; and 16 in 1989–1991. Those games were originally made for arcade machines and for American home videogame consoles (Atari 2600 and Mattel Intellivision especially). Thus, the Game Room is more strongly designed for virtual retro environment for game arcade games, but not totally, in spite of its "game center" outlook. One reason for making of virtual space of arcade is to courage retrogamers to consume. Raiford Guins (2004) argues that space is essential when recollecting memories and reconstructing gaming experiences with arcade games (on "retroscapes" in general, see Brown 2003).

Most of the Sony PS Network downloadable games are novelties, but Sony also lean on popular games of its earlier consoles, especially games of original PlayStation like Tekken (Namco, 1994) and Castlevania (published actually already before PS, 1986 by Konami for NES and MSX2). Those games can typically be adaptions of older computer or arcade games. Altogether, there were about 300 games in PS Network online store in summer 2010 and 575 games in late December 2011 for PS 3 (after Summer 2010 the amount of PS3 games has bypassed the amount of PSP handheld console games). It seems that the process through which games become classics or retro is still under progress, and Sony does not use 'classic' or 'retro' as a game genre in its catalogue. But probably in the future, Sony and Microsoft will expand their retrogaming repertoire - if it will be commercially reasonable. And it is likely, that now it is becoming: in late 2011, Sony has started to advertise emulated PS1 games: "Return to your golden memories with the most popular PlayStation games in their era. Re-experience the great moments of game history in emulated classic games, which were once released for the original PlayStation. Download your favourite from the versatile selection of PS one games – now you can play classics either with PSP or PlayStation 3. There are inexpensive games for every taste." (Translation JS, http://fi.playstation.com/psn/services/detail/item436688/PSone%C2%AE-klassikot/)

CONCLUSION

Historicity and uses of history are integral parts of contemporary game industry and digital game markets. The paper shows differences in how three major videogame console manufactures, Nintendo, Sony and Microsoft, use their history as well as wider history of the gaming industry. Nintendo's use of history is the most obvious, mainly because the corporation has the longest and largest tradition in gaming industry and its strategy consists of deep alliance between game hardware and self-produced game software. In addition, it constantly fortifies its key iconic gaming characters and brands such as *Super Mario Bros*. This can be the company's strength in the future as well, if it continues to be successful in raising new Nintendo and *Mario* player generations by combining old game characters with new innovations and playabilities. On the other hand, "The legacy of Mario" or Nintendo's classic consoles such as Famicom in Japan can become a burden that might limit possibilities for new innovative game applications and shifts to gaming environments such as mobile phone gaming or social (media) and online gaming.

I suggest that there are at least two different kinds of retro icons, both in hardware and software. The first type, *common retro*, is a popular device or a game, which gained its position as a sign of the whole user generation. The product is popular for various reasons. I would argue that Nintendo Wii console has – as well as Apple iPhone – possibilities to become such retro icon in the future.

The other sorts of products are retro icons due to their curiosity nature (*curiosity retro*). They usually have an interesting story behind them: the story about failure despite their technological advances. They did not become successful, because of wrong development or marketing decisions, because they were too advanced or lacked some essential features. Nintendo's Power Glove (1989) and Virtual Boy (1995) are examples of these kinds of products that nowadays have some cult popularity and collectible value due to their rarity.¹⁴

Both types of products can be re-used, replayed and recycled later, and I would argue that game companies and corporations – like other companies – would benefit from history management strategy, which consists not only of revification plans of their older and current products based on some "Nostalgia Exploitation Potential" (Davis 1979, 132–138) but also of campaigns for celebrating key points in the companies' history, knowledge transfer program, maintaining of product versions and histories as well as procedures for archival and museum practises and making of company histories. This kind of history management policy or strategy is not important only for large corporations but also for small start-up companies and middle sized companies who are seeking to develop and entrench their position.

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ENDNOTES

1 Game classics can be defined, according to Frans Mäyrä (2008, 55), games that have "something of 'recognized value,'[and that are] 'enduring' and 'historically memorable.""

2 However, also in Finland, there are some corporations such as A. Ahlström which operates nowadays for example in forestry and real estate industries, where uses of history have been systematic for a long time (Grahn 2012).

3 Today, it looks that Finnish game companies, for example, are not fully aware of the importance of game cultural or industrial history. My hypotheses is that even though there are mouth-to-mouth folkloristic conceptions or common grand historical narratives of the industry (Saarikoski & Suominen 2009; Köönikkä 2011) this implicit awareness has rarely led to the creation of company archives or preservation of game products, design documents and other material. Preservation appears to be in the hands of active hobbyists or academic communities and memory institutions, which have only recently began to ponder with questions of game preservation (Swalwell 2009; Newman 2009; Guttenbrunner et al. 2010; Barwick et al. 2011) – even though not in Finland.

4 In German literature, history management is related more strongly to branding of companies (Herbrand & Röhrig (eds.) 2006).

5 Knowledge management research has focused on these factors.

6 According to Andrew Blake (2002), the term retrolutional was coined for Jaguar car marketing.

7 The cross pad was introduced with Game&Watch Donkey Kong double screen game (1982) and used for example with Nintendo Famicom / NES consoles (1983, 1985).

8 The subsequent chapter is based on Wikipedia articles on company histories and ICT magazine sources if not mentioned otherwise.

9 According to FIGMA, the joint organization of Finnish game industry, the share market value of console games was about 85 % of all markets in 2011 (The whole game market in Finland in 2011 was 2.5 million sold copies and value of 95 000 000 euro). (FIGMA 2012. On international statistics see e.g. Kerr 2006, 48–53).

10 One can see some historical irony in this, because Sonic was originally used as an important weapon in Nintendo vs. Sega console wars. After Sega lost this war and focused on developing software, Sonic character has been introduced and diffused also in Nintendo games.

11 Such artifacts can be interpreted as, for example, cultural monuments or fetishes.

12 Their production was monopolized and restricted by game console manufacturers.

13 Sega was established in Hawaii in the 1940s. It contested with Nintendo in the 1980s and the 1990s but transformed into a third party game developer in the 2000s producing games for different devices.

14 Nokia Meego phone (N9, 2011) is also on the way of becoming such product.

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