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GAMEOFF: MOVING BEYOND THE 'ORIGINAL EXPERIENCE' IN THE EXHIBITION OF GAMES

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Abstract

As digital games are moving increasingly into the mainstream of Western cultural life, issues of how to handle digital games in cultural institutions like museums, art collections and archives have risen. Yet how to exhibit digital games has been a contentious issue. This study focuses on exhibition by exploring the game exhibition GameOn 2.0, hosted by The National Museum of Science and Technology, in Stockholm, Sweden. This study asserts that even museum exhibits of digital games focusing on the playing of games on original hardware runs the risk of making the game experience inaccessible even for seasoned gamers. Analyses of interview material with staff involved in the exhibit show that both the environment, the selection of games and focus on play were limiting in conveying the social and historical relevance of digital games in a museum context. Inattention to contextual aspects make even games from the 80’s and 90’s inaccessible to younger participants, who has to rely on adults with experiences of the period to act as guides, here parents and grandparents.

1. Introduction

"What are the significant properties of digital games which we should seek to maintain and what are their relative degrees of importance? Without this knowledge, we are poorly positioned to select and appropriate preservation strategy from the options available."

(McDonogh et al. 2010:123-124)

As digital games are moving increasingly into the mainstream of Western cultural life, issues of how to handle digital games in cultural institutions like museums, art collections and archives have risen (Barwick, Dearnley, & Muir, 2011). Preservation has been the key question so far (e.g. Bartle, 2012) but deeply intertwined with the issue of preserving digital games comes the issue of how to present, show, and demonstrate games, in other words, how to exhibit digital games. This study focuses on this question by exploring the game exhibition Game On 2.0, hosted by The National Museum of Science and Technology, in Stockholm, Sweden. Through interviews with key personnel at the exhibition, as well as documented visits to the exhibit, and analyses of printed material connected to the exhibit, this paper will develop a discussion of possibilities and difficulties in presenting digital games as part of a museum exhibition.

Previous research around the topics of digital games and museums with the aim of deciding what to preserve and exhibit has led to an open ended discussion of what exactly a video game is. In Lowood's (2006: 6) ground-breaking discussion he asks if digital games, video and computer games, are texts or performances or if they are artifacts or activities. Researchers have even argued that there are no such things as digital games (Newman, 2012: 123). Through years of discussion on what games are, or are not, game studies has shown that games, as in material and digital artefacts, are only one part of what constitute a Game, or, games only comes to be as they are engaged in. In this way, not only artefacts matter but also the playing of games, which shape the content, meaning, and materiality of games themselves (Consalvo 2009; Corliss 2011; Mäyrä 2008). The contextualization of material (and now also digital culture) is something that museums all over the world excel at doing: providing visitors with rich description and analyses of historical and cultural context, giving the sense that past generation's heritage is irredeemably cultural. At the same time preservation of digital games has focused on the material and digital artefacts and placed less importance on other aspects such as play culture or the ongoing social life which is at the core of massive multiplayer online games (MMOs) or indeed the fact that digital games now are a presence to be counted on in the shaping of popular culture, or as a sector for work and technical production. Indeed, how to preserve and exhibit these aspects of digital gaming is a problem which preservation institutions such as archives, libraries and museums (ALM sector) are struggling with (Barwick et.al., 2011). The study at hand is grounded in the last 10 year of study of digital games in order to investigate the practice of exhibiting digital game. We draw on the extensive research that has investigated digital games as play (Consalvo 2009), as well as games in culture (Shaw, 2010). We thus base this study on an understanding of games as material and digital artefacts, as an activity, and as taking form and meaning in a social and cultural context.

Our contribution to this discussion is to investigate one of the world's largest traveling exhibitions of digital games; GameOn 2.0 as exhibited in The National Swedish Museum of Technology and Science (hereafter Tekniska). This exhibition offers visitors the opportunity

to play hundreds of games on original hardware, thereby fulfilling two of the most commonly formulated requirements for game exhibition and preservation. By looking beyond games as digital and material artefacts, and instead incorporating aspects of practical gameplay and the wider contexts that gaming occur in, our aim is to inform research as well as practical work on preservation and exhibition of digital games in the ALM sector. Our research question is: In what ways does GameOn 2.0 engage with the artefacts, practices and contexts of digital games?

This study asserts that even museum exhibits of digital games focusing exclusively on the playing of games on original hardware runs the risk of presenting a limited view of digital games. Analyses of interview material with staff involved in the exhibit GameOn at The National Museum of Science and Technology Stockholm, Sweden, show that both the environment, the selection of games and focus on play were limiting in conveying the social and historical relevance of digital games in a museum context.

2. Background—GameOn and GameOn 2.0

Game On, or more exactly GameOn 2.0 is an exhibition of playable digital games originally produced by Barbican, a museum in London, UK, that has been touring the world since 2010. The first Game On opened its doors in 2002 and the updated version, also with additional games from the early years of game development, GameOn 2.0 launched 2010. Before Tekniska hosted the exhibition it had been in Canada, Hungary, Norway, the USA, Greece, and Australia (Barbican, 2016). GameOn 2.0 stayed at Tekniska from 25th of October 2013 to the 28th of September 2014. This is a comparatively long period for the museum to host a rented exhibition, but is due the fact that the exhibition was prolonged due to the high number of visitors. Game On 2.0 has in terms of visitors per year been the most successful exhibition at the museum.

While the PR material describing Game On focus on the many playable games in the exhibition the stated aim of GameOn according to Conrad Bodman, the original curator, was to "... look at the history, culture and the future of video games and try to unlock that for the general public." (Hill, 2008; interview with Conrad Bodman for www.theage.com.au). In this interview Bodman also stresses that GameOn offers the possibility to play games on original hardware as a focus of the exhibition and explains that this possibility is increasingly rare as working original games and devices deteriorate over decades. Bodman declares the importance of museums taking up games which had been neglected as culture in the past and warns against the loss of a big part of contemporary culture and history if games should continue to be ignored by the ALM sector. On Tekniska's web-page the exhibition is described as aiming to inspire curiosity about game development, sound design, character background stories, game culture, and the history of game marketing.

In summary it can be said that GameOn 2.0 at Tekniska was an extraordinarily successful exhibition for the museum and that the aims of Tekniska and Barbican as formulated by Bodman (Hill 2008) extend further than allowing games to be played on original hardware. Tekniska stresses educational aspects and wants to inspire curiosity also about economic, societal, and cultural aspects of digital games while Bodman (Hill 2008) stresses the importance of the preservation of games as culture and art history.

3. Games at the museum: A study framework

This study is informed by a set of theoretical assumptions about digital games. These are not unified in a single theoretical perspective, but can rather be said to be areas of interest in game studies; we focus here on games as artefact, as activity, and as coming into being situated in culture. This is by far an uncommon take on a holistic understanding of games but is rather an attempt at drawing on theoretical developments in game studies to understand the exhibition of games. This structure is implicitly inherent in several overviews of game studies. For example, Björk (2008) divides the study of games into studies of the actual games, gamers, and the activity of gaming. An argument can also be made that this division is for the sake of structure and convenience—to even make a distinction between these three areas confounds the ways in which they are indivisible parts of the same sociomaterial complex (c.f. Taylor 2009). Here, we aim to discuss these three aspects as interlinked in actual practises, yet for analytical clarity they will also be dealt with separately.

3.1 Games as digital and material artefacts

Research has shown that 'the original experience' of playing old games on original hardware has been a prioritised mantra for museums and other cultural institutions working with games (Swalwell 2013). In other words, the material objects have been in focus. This makes sense to some extent. Playing a game on a game boy provides a very different experience from playing it on an emulator on a PC. However, the critique against the heavy focus on the 'original experience' takes the form of three arguments. The first is that it is non-trivial to find an original version of a game. Due to bit rot games, even form the 90's, are already disappearing. For newer games, regular updating and simultaneous release on a multitude of formats such as consoles and PCs makes it hard to pin-point the original version of a game. Furthermore, especially online multi-player games, are developed and built upon by players themselves creating content (Prax 2015), which leads to another layer of complexity that influences what the 'original' experience of a game is. Older games on the other hand can have different versions released in different countries. In other words there are many aspects that make it difficult to define the 'original' game (Guins, 2014).

A second problem with original hardware and even software is that using it for exhibition purposes is not sustainable. Old gaming hardware is no longer produced and cannot always be repaired, at least if it is supposed to stay in a state of 'originality'. Moreover, software on its original storage devices, e.g. gaming cartridges, can break down. This means that there is a best before date on playable games (Newman, 2012). Newman concludes "the long-term ability to play might not, cannot and perhaps even should not be the objective of the game preservation project." (Newman, 2012: 123). The only way to preserve digital games for a long-term future seems to be emulation, the creation of digital environments that allow for old game to be played and preserved on new devices (see Pinchbeck et al., 2009; Van der Hoeven, Lohman & Verdegem, 2007). However, this will only, at best, be close an original experience. Emulation has been discussed in previous research also in relation to intellectual property (IP) and copyright issues and is at present problematic because of the limits IP legislation imposes on the abilities of museums to copy and emulate for both preservation and exhibition purposes (Barwick et.al. 2011; Lowood et.al. 2009; van der Hoeven et.al. 2007). This means that originality of playable games and their devices seems unachievable, at least for now.

“While it is necessary to keep original specimen of systems and games for museum purposes this can only be an approach for the digital preservation of the software for the very near future (short-term)” (Guttenbrunner et al. 2010:76)

The third problem related to originality of games in a museum is that gaming has to be understood in a specific context. . The context of playing games on older devices, perhaps in a living room in front of an old TV as a 10-year old with one’s siblings cannot be recreated. A gaming console or old PC needs to be connected to other devices located in both time and space. Neither can the experience of playing the game. A game in this sense “is a growing and mutating collection of many objects.” (Newman, 2012: 123).

Thus, a playable gaming console is a different object when it stands in a museum and playing a game in a museum is something different than doing so at home or in an arcade. This is reflected in Guins’ (2014) concept of ‘Game After’, the afterlife of a game. Guins (2014) points out that a game as an object or activity in a museum enters another phase of its existence and becomes a different object. To elaborate, when the game was still in production it was something else than the finished product, it was something people worked on and built. For parents who buy games for their children they are again different objects, with different meanings attached to them. By extension mean that games are something different for a museum audience as well. As Fisher (1997) argues in relation to art in museums, a single object has many lives.

In conclusion it can be said that while it is desirable to present playable original games in an exhibition it cannot be expected that visitors will have the same experience as players had with the game in its historical context and it is questionable whether providing playable games on original hardware is enough to achieve the objects of game preservation and exhibition. However, while Guins (2014) is critical of originality he gives examples for an alternative for conveying the cultural, social, and economic relevance of games, through story-telling. Something we will come back to.

3.2 Games as activity/practice/doing

As games are clearly more than digital and material artifacts, the immediate issue for an exhibition of games is that games need to be played to be understood. While this is not a categorical difference, other software products or technological tools could be better understood through using them and other media texts need to be read to understand their relevance. For example, photography can be viewed in a photography museum. However, it is a central point for exhibiting games. Versions of these questions have been discussed at length in the literature on games in museums and have been examined in detail in the three central publications in this field: Guins’ (2014) “Game After”, Newman’s (2012) “Best Before”, and McDonough et al (2010) “Preserving Virtual Worlds Final Report”.

Guins (2014) collected data from and analysed a number of game exhibitions , which makes his account useful for our study. He concludes that the preservation and exhibition of technological artefacts that cannot be used, games that cannot be played by the visitors of a museum are not enough but that play also needs to be preserved and presented (Guins 2014). Newman (2012) arrives at a similar conclusion stressing the importance of gameplay, while stating at the same time that it is: that most intangible and elusive of gaming concepts (Newman, 2012: 133). This discussion is related to the ongoing search for a definition of a

game in games studies which so far has been answered by models like ergodic literature (Aarseth, 1997) that describes games as a text that needs effort to be traversed, but also by Lowood who asks, Text or performance? Artifact or activity? (Lowood, 2002:6). In general the conclusion has been that games come into being as they are played, as we interact with the games.

In conclusion it can be said here that play is a central concept for both preservation and exhibition of games. Games are a key phenomenon of both material and immaterial cultural heritage. All games come to be as they are played (Corliss, 2011). Games are objects and as such they can validate memory (Loventhal, 1985) games are also part of how people practice their daily lives and essential for our understanding of human culture. The act of playing is what makes games come to life.

3.3 Games in context

Gaming as situated in and being culture is not limited to the content of games. Instead there are multitudes of player-created texts like fan fiction, wikis, let's play videos, guides, mods, and much more, much of which Consalvo (2007) would call the paratexts of gaming. This poses the question if these texts should or could also be preserved and exhibited and if it is not better to show player culture and player-created content when aiming to make visitors understand the cultural relevance of a game. This is especially true for games that have vast and productive communities. Gaming culture has produced some of the most prominent and influential online content producers on youtube.com (based on subscriber numbers and videos watched) and E-sports is a growing phenomenon not only in Asia but also in the western world. Sweden has Dreamhack, one of the biggest gaming festivals. Even further, studying games in and as culture can requires that the net be cast even wider. Games as artefact and practice are entangled in much wider societal and historical processes. For example, games are part of children' and adolescents everyday lives (Aarsand, 2012), connected to families, leisure and school (Eklund, 2015). Studying gaming in family life may require of the researcher to develop analyses regarding not just gameplay itself, but also things like child-parent relations, domestic regulation of game hours and discourse regarding the nature of childhood, to name just a few.

Guins (2014) mentions a number of examples from exhibitions not necessarily focussed on digital games that do point out a way to grant insights into what games are. The first example comes from "America on the Move", an exhibition on US American History. The exhibition shows a historic car without explanation. However, narratives about the relevance of this car can be provided by other visitors of the museum as Guins exemplifies in this imagined discussion: A voice is heard behind you: I used to have one like that. (2014:53). Guins (2014) also presents an example from the Computer History Museum where games are used to tell stories about technology.

The decision to include games as artefacts, when possible as activities was to support the "stories that we want to tell that we could get a hold of"(Guins' interview with Chris Garcia at CHM) Games were collected to assist in telling the history of computing. (Guins, 2014:55)

Using games for illuminating computing history is an example for how artefacts can allow access to industry history and cultural and economic questions (Guins 2014).

In other words, exhibits can go beyond exhibiting objects and instead tell stories about society and how objects can be used to do that. While objects like games and consoles can be used to open access to cultural and social context of games the questions is if there are other ways to document this context of games. This question also comes into focus as both Tekniska and Bodman (Hill, 2008) expressed the aim of GameOn 2.0 the exhibition as inspiration for an understanding of societal questions and the preservation of games as art history. In game studies there is a wealth of previous research that does investigate game culture (Jenkins, 2008; Taylor, 2006; Nardi, 2010; Pearce, 2009), production of games both in production companies (O'Donnell, 2014) and by players (Prax, 2015; Chen, 2009; Pearce, 2006), the sociality of play (Eklund, 2012), and competitive play (Taylor, 2012) going so far as to ask "Are we even playing the same game?"(Ask, 2011) because the practices of different groups of players of the same game diverge substantially. While it is not obvious how this complex and varied context of play can be exhibited in a museum it needs to be kept in mind that this is what is needed to fulfil the requirement of preserving and making available this part of modern culture.

4. Method

This study concerning the GameOn 2.0 exhibition mainly relies on a series of interviews carried out with museum staff at Tekniska in 2015. All interviews used a similar semi-structured design and the interviews focused on the informants professional and gaming background, their role within the exhibit, their concrete work tasks and experiences from the exhibit and the role of the exhibit in the museum. Broad and open questions were asked in the style of in-depth interviewing or open-structure interviewing (Hayes 2000). Interviews allow in-depth information and allowed us to capture the knowledge of those who had been working with, in our case, the exhibit first hand (Cote and Raz 2015). Individual interviews in contrast to e.g. focus group interviews were suitable as the topic had the potential to be sensitive, discussion about ones work place (Lindlof and Taylor 2011). However, during the interviews we noticed no such hesitation which could be due to the strong laws protecting worker rights in Sweden and/or the fact that the exhibit itself was not locally produced but rented by the museum. It was explained to all informants that we would do our best to protect their confidentiality, in other words their names would not be used and any potentially identifying information would be removed from quotes. However, as the group working with the exhibit is relatively small we explained that there was a potential risk that co-workers would recognize them. All informants still agreed to participate in the interviews and allowed us to record the sessions.

The interview guide questions related to the exhibit was created by visiting the exhibit on multiple occasions and participating in a guided tour. All three authors spent time in the exhibit, both interacting with it and simply observing others interact. We also explored the written material that accompanied the exhibit, from promotion material, set-up instructions, to signs and visual design elements. An example of interview questions thus defined is: "Tell me about the guided tours through Game On". The impressions gathered from these explorations together with knowledge based on previous research laid the ground for the interviews. Informal discussions with museum staff about the exhibit were also integral in identifying which staff members we should approach to ask for interviews.

The interviews, a total of six, were transcribed in full and all quotes translated by the authors. An inductive analysis was done first by reading and re-reading the transcripts and discussing them in among the authors. In a second deductive step a thematic qualitative coding was done using three over-arching analytical categories drawn on from the data in combination with the theory, games as objects, games as activity, and games in culture. These were coded separately by the authors and then discussed until consensus was reached. The results section below is structured according to these three themes.

5. Results and Analysis

This section analyses the ways in which GameOn 2.0 allows for an understanding of games as artefacts, activities, and in and as culture. While the three sections are presented separately for analytical clarity,they in practise build on and tie into each other.

5.1 Games as artefacts

GameOn 2.0 is in its essence an exhibition embracing the 'original experience' of museum curation. It offers a multitude of playable games on original hardware. When entering the exhibition one is faced with this materiality; one of the first items is a dysfunctional Pong arcade machine. This and some other non-playable arcade machines are some of the only artefacts that cannot be played with but which purpose is to stress the aspect of traveling through the epochs and history of digital games.

GameOn 2.0 focuses on displaying authentic object from gaming history, but key is visitor's ability to play with these artefacts.

It is really good, of course, that they go with these old consoles … because it is a very special feeling to play on these old ones that you can't really recreate with emulations and so on. (Interview with exhibition staff)

The staff involved with the exhibition highlights the unique opportunities that GameOn 2.0 offers; access to original games and consoles, collected by curators in one place, and available to a large audience. The exhibition allows access to the 'original experience' of gaming by making gaming history available in playable form to a general populace. The large amount of games was highlighted in advertising about the exhibit and is also, according to the informants, what made the exhibit such as a success in terms of visitor numbers.

On the other hand, the staff working in the exhibit pointed to several gaps among the games displayed in GameOn 2.0. Foremost, the lack of information displayed besides the games themselves. Almost no signage accompanied the exhibition except instructions on how to play the various games. The exhibition displays the games according to a few themes, such as genres, the arcade, children games, and so on. Yet these feel disconnected and informants all agreed that they made little sense to visitors, or staff, as an organising principle. The staff also highlighted how the few signs that was up got drowned out by the games. Amidst all the noise and blinking screens any printed signage simply disappeared. The games demand all the attention from the visitors. In other words, it was difficult following any sort of red thread through the exhibit. As an informant described it:

[GameOn 2.0] lets the games really speak for themselves. “Here, play a lot of games!” It feels like they are not trying to be anything else than that either. (Interview with exhibition staff)

While the exhibit presented a wide array of games, some genres and game types where absent. For example, games with an age rating of 18+, PC games, and entire genres such as strategy games, which are key to unlocking the history of digital gaming (Smith 2009).

There was a lack of, for example, RPG-games and similar, it was a bit bad and then it was, well what to say, on the posters it said ‘The world’s largest computer game exhibit’ and there was only two computer games, and the rest where console games and arcade machines. (Interview with exhibition staff)

The canon presented in the exhibit thus has several obvious gaps, games with an older age rating was taken out as it was expected that a lot of children would come to the exhibit, and PC games take a lot of maintenance to keep the right hardware and software for a game functional. PC games take much more work to play in an original state than consoles games. Lastly some genres, even if they had some representation, such as role playing games and massive multiplayer online games (MMOs) was generally lacking.

If I go there and play World of Warcraft and I have a hard time walking through the forest and looking, adjusting the camera, then why do people spent thousands, tens of thousands of hours’ worth of this game. I do not understand it from playing it for a bit in a museum. (Interview with exhibition staff)

The amount of time that needs to be invested in an MMO-game or other role-playing games, makes it difficult to exhibit these games in an museum where the focus is on the interactive nature of the ‘original experience’. Visitors in general spent a few minutes on each games, as in the quote, hardly enough to understand a game like World of Warcraft (Blizzard, 2004). While not necessarily a problem one can still argue that an exhibit that is set on portraying the history of a medium such as digital games that doesn’t, in any way, discuss selection criteria or left out artefacts, becomes lacking when whole genres and all PC games are left out.

GameOn 2.0 made older games and thus gaming history accessible to a wide audience and focused on presenting the original experience by allowing the games to speak for themselves. However, little extra information or guiding assisted visitors in unlocking the meaning of these artefacts so it was up to the visitors themselves to make sense of this history; something we will discuss in the next section.

5.2 Games as activity

Interaction and play were the primary motivation for the exhibition, exhibiting a smorgasbord of digital games from an extensive time-period. As such, it embraces the notion that games come into being as they are played. While games are on display as artefacts, they are also playable interactive objects. Nearly all games are playable, the only exceptions being a few of older games, and a section of the exhibition displaying hand-held devices behind glass. Visitors could choose to play whichever game present that they liked, or observe other visitors playing. As such, spectatorship was an important feature of GameOn 2.0. Play and interaction

with games was a key feature of the exhibition, and “fun”, “interactive” and “positive vibe” were three ways in which informants used to describe it.

As far as gaming activities go, informants specified multiplayer games as being the most successful for interaction between visitors, as well as staff. There were several multiplayer games, most of them using two players playing co-op or against each other. Multiplayer games with more players were scarcer. Halo (Bungee, 2001) and Super Smash Bros (Nintendo, 1999) stood out as the two games that consistently gathered crowds, both for playing and spectating, and were considered two of the more popular displays at the exhibition. The staff perceived that the larger number of players that these games would accept lead to further engagement and interaction between players.

> […] Super Smash Bros and Halo were always always, always occupied, and then people like got to talking […], people got to know each other there. (Interview with exhibition staff)

The exhibition also promoted interaction between children and adults. Visitors with different levels of experience and gaming skills were able to play together.

> There were also a lot of children and grandparents for example, […] it was often like it was fun you could see like a grandmother beat her grandchild in Pong, so that was fun. Like couldn’t play anything else, when they played Halo they were completely lost, then like walk up to Pong and beat their grandchild, so that was fun (Interview with exhibition staff)

The exhibition also promoted other types of cross-generational interaction, with parents presenting games to younger generations that they had played as children, and children presenting newer titles to their parents.

> So I think it works a little wore for them [parents] because they don’t’ understand playing games, they haven’t gotten into it, how to use a controller, they are completely lost and come up to us working in the exhibition ‘Yea but now it doesn’t work, how do I do here and how do I do there’ […] (Interview with exhibition staff)

A common theme in the personnel’s narratives of the exhibition is that playing games required prior knowledge and skills. Many times this related to the concrete physical manipulation of controllers, where they could be held upside down, or where the mapping of names of buttons to where to press was far from transparent to novice users.

> […] every time an X appeared on the screen and they got a hint they were completely confused and didn’t understand that the X there means the X on the thing they were holding […] (Interview with exhibition staff)

The general requirement of prior knowledge of games, and the lack of transparent instructions (either because they were obscured from view or simply hard to follow for most visitors) was a continuing problem at the exhibition. Visitors without previous skills in the games would be left confounded of how to play.

[…] there was very little focus on trying a game like properly, but most of the time it was like picking up the controller, and then like ‘oh I don’t get it’, and then shut it down and move on. (Interview with exhibition staff)

The interviewees observed that visitors often gravitated towards games that they had played before and knew already. Nostalgia seemed to be an important driver for visitors. While this lead to inter-generational interaction and learning, it would also limit the new things visitors learned about games.

Informants acknowledged that the prior knowledge needed for visitors was a weak point in the exhibition, arguing that it worked well for gamers but less well for people with no or little previous experience of gaming.

GameOn is very confirming. If you are a computer gamer you go in there and you see all the stuff you played and you can play. If you are not a gamer you go there and you look at these games and it is very hard. You get confirmed in your view that this is hard and not for you. (Interview with exhibition staff)

Another problem was that the temporality of the exhibition was resistant to providing visitors with incentives to play games for more than a few minutes, and for players to engage more thoroughly with the games. Instructions provided very scarce input on how to manage the games, and in most cases players learned from each other, had enough previous gaming skills to cope themselves, or simply left the game. Additionally, at many times visits were limited to 50 minutes due to the limited space available and the high number of visitors to the museum. Spending more than a few minutes with a game therefore meant much less time to see the rest of the exhibit.

The noisy and oftentimes very crowded exhibition also lead to visitors playing whatever game was available, rather than the one they otherwise would have preferred. Noise, crowdedness, and visitors, especially children, being constantly distracted by the sights and sounds of the games made guiding very difficult, and very little organized guiding was done in the exhibition, except for a few school classes and some other select groups. In other words, the activities at the exhibition consisted of play first and foremost –but play that relied on player’s previous experience with the games, rather than presenting novel experiences for visitors. However, the visitors themselves somewhat compensated for this, using play activities as starting points both for interaction among themselves, but also for conversations about the games. Games dedicated to multiplayer lent themselves the best to this, especially those with more than two player capacities, and those were also the games that most easily lead to interaction between visitors previously unknown to each other.

5.3 Games as culture

The way in which GameOn 2.0 was structured, in one informant’s words, “as a giant arcade” leads to certain ways of interacting in the exhibition, as described in the previous section. As stated, this lead to information regarding the games being difficult to disseminate among visitors. Moreover, the wider contextualization of games as part of culture, and having a specific cultural form of its own, was underdeveloped in the exhibition.

The structures of the exhibition leant itself to at least some vague historical and geographical contextualization of games, the first room was an early history of games with games such as pong. However, this was not the main point of the exhibit—play and interaction with games was always placed at the forefront. The ways in which these games are interconnected with larger developments in society, history or even game culture remained largely a fringe aspect of the exhibitions, if at all.

The morsels of history of development of certain characters, games, franchises or game design was largely presented through signage, which was in many cases difficult to notice, were too long or too complicated, similar to the instructions to play the actual games. Providing visitors with comprehensive views of for example the history of digital gaming was also difficult due to the selection of games, where the focus was on games that were playable in a short amount of time. This excluded many types of games, such as most roleplaying games and strategy games. The lack of any game with an adult only rating (18+) also lead to a somewhat skewed selection of games. Even as a chronological arrangement, the exhibition could not approximate the important touchstones of gaming history.

Informants noticed that the exhibition did not make cultures of digital gaming transparent to visitors unfamiliar with such cultural forms. Many suggested remedies for this, but also acknowledged that this was dilemmatic in relation to the stated aim of the exhibition to provide visitors with playable games.

For some aspects of gaming history, such as arcade gaming, the exhibition was well equipped, where its final room was lined with side-by-side arcade machines of many kinds. However, while it did show a different kind of gaming, and one that the children visiting were likely unfamiliar with, it also lacked in crucial aspects, such as the coin-operation of the arcade games in decades prior or perhaps even the feel of an old arcade hall.

It’s like, the information might not have gone through […] like why it looked like [this], that you actually had to go and play these somewhere in your arcade hall, and like that might not have been transmitted , or that you had to pay, maybe that wasn’t clear, for these machines. (Interview with exhibition staff)

However, once, again, intergenerational instructions may have been helpful, and the arcades being a place in which visitors engaged in storytelling and queried each other about the games of past times.

More controversial themes in gaming culture were not included at all, such as the alleged connection between games and violence or addiction, representations of women in games (as well as other gender-related issues), or the means and modes of production of digital games. Other parts of game culture, such as LAN-events or e-sport were left out altogether. The focus was solely on the parts of digital gaming that created an ‘enjoyable atmosphere’. This proved to be very difficult to combine with critical attention to less positive aspects of gaming culture.

6. Discussion

This empirical study focused on the exhibition of digital gaming in museums, by asking, In what ways does GameOn 2.0 engage with the artefacts, practices, and contexts of digital games? By looking beyond games as digital and material artefacts, and instead incorporating aspects of practical gameplay and the wider contexts that gaming occurs in our aim is to inform research as well as practical work on preservation and exhibition of digital games in the ALM sector.

The study points towards an inherent dilemma based on the interactive nature of digital games. While it seems clear that we must engage in games in order to understand them. This interactive criterion poses certain problems for an exhibit focusing exclusively on this interactivity. Namely, we show that the expressed interactivity allows visitors to engage with and have the chance to experience old games on original hardware. As such it offers its visitors a unique insight into the vast history of digital games from the 70's until today. However, this focus on playability limits discussions around any critical and controversial issues around games in culture and society.

A a museum exhibition with a focus on playable games and original hardware it thus falls short of fulfilling the aims of showing the meaning and relevance of digital games for society that come with the responsibility of a museum as well as the aims of Tekniska and the creators of GameOn 2.0 themselves, which extend beyond having an exhibition with playable original games. The lack of pedagogical and informative function of the exhibition was cited as one of the biggest problems, and one that made staff working in the exhibit question its place at a museum. The interactive nature of GameOn 2.0 does not afford putting games into context and thus much of their meaning and history is left out, aspects important for museums that often have educational obligations. We argue that exhibitions of digital games need to strike a balance between interactivity and cultural and societal contextualization. The exhibit lifts up interactivity and play but lacks critical perspectives and thus ends up excluding visitors lacking the game literacy needed to benefit from such an exhibition. As our results show, those visitors without enough game literacy to be able to pick up and play the games without assistance, did not have the tools to be able to understand the story the exhibit was telling. GameOn 2.0 brings an arcade into a museum and while an important contribution to establishing that games do belong in museums, the next step in the exhibition of digital games needs to take a more holistic perspective on digital games, culture, and society.

As Guins (2014) shows, it is problematic for museum visitors to decode the meaning of an object, just by looking one cannot see the story that can open up a fuller understanding of the relevance of this artefact to visitors. Games by themselves might thus not be always be able to allow for reflection but might need added information, guiding, or narration to make good on the requirements of a museum exhibition. The story about the unexpected success of Pong (Atari, 1972) prototype that even stopped working because it was clogged with coins after just a few days is another example often mentioned in the literature, because it illustrates the particular economic and cultural circumstances from which the game industry emerged. This approach to museum exhibits, be it artefacts or playable games, working as windows for visitors to understand the past, foreign cultures, to learn about production of culture, and to tell stories to each other seems like a promising possibility for critical reflection on games.

If we connect back to our theoretical framework, looking at games as artefacts, activity, as well as in and as culture, it becomes obvious that this theoretical development in game studies has as much applicability in other contexts. A one dimensional display of games will not afford a multidimensional understanding. The insistency to prioritize play over other aspects of games lead to an unnecessary near sighted exhibition. While it undoubtedly provided an open-ended play-space for visitors, it could simultaneously be said to be implicitly exclusionary. Superficially, anyone could play any game, and thereby understand some of the meaning and importance of that experience. In actual practise, players without prior skills were often left confounded and without resources to interact and participate in gaming activities.

Combining critical reflection and wider contextualization of games and gaming culture proved difficult in GameON 2.0 also because the museum sought sponsorship from the games industry, which however, did not happen. As well as pointing to contentious issues relating to corporate sponsorship of museum exhibits, it also clearly delineates the aim and mission of the exhibition, where playful interaction, enjoyment and “original experience” was prioritized over contextualization, pedagogics and cultural relevance.

7. Conclusion

This article asserts that even museum exhibits of digital games focusing on the playing of games on original hardware run the risk of making the game experience inaccessible even for seasoned gamers. Analyses of interview material with staff involved in the exhibit GameOn 2.0 at The National Museum of Science and Technology Stockholm, Sweden, show that both the environment, the selection of games and focus on play were limiting in conveying the social and historical relevance of digital games in a museum context. Inattention to contextual aspects make even games from the 80’s and 90’s inaccessible to younger participants, who had to rely on adults with experiences of the period to act as guides, here parents and grandparents.

We show how interpreting games and play as outside of a temporal and spatial context can render the meaning of games inaccessible. For a theoretical and practical understanding of what gaming is games as artefacts, playing as an activity, and the temporal and spatial context in which these artefacts are made and this play takes place needs to be part of a multidimensional and complete understanding of gaming.

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